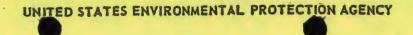
# EPA Registration No. 39967-137 Vol. 8





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAY 4 2011

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Susan M. Schaner

E.I. du Pont de Nemours and Company

Dupont Chemicals & Fluoroproducts,

P.O. Box 80402

Wilmington, DE 19880-0402

Subject:

Virkon(R) S

EPA Registration Number: 71654-6 Application Date: March 31, 2011 Receipt Date: April 5, 2011

Dear Ms. Schaner:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide (FIFRA), as amended, is acceptable.

#### **Proposed Amendment**

Updating Label per Agency Letter Dated 7/15/10 and Meeting on 3/30/11

#### **General Comments**

Submit 3 copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

If you have further questions concerning this letter, then please contact me by telephone at (703) 308-6416 or by e-mail at <a href="mailto:campbell-mcfarlane.jacqueline@epa.gov">campbell-mcfarlane.jacqueline@epa.gov</a> or Stacey Grigsby by telephone at (703) 308-6440 or by email at <a href="mailto:grigsby.stacey@epa.gov">grigsby.stacey@epa.gov</a>. When you are submitting information or data in response to this letter, send a copy of this letter to accompany the submission in order to facilitate processing.

Sincerely,

Jacqueline Campbell-McFarlane

Product Manager 34

SYMBOL DATE

CONCURRENCES

CONCURRENCES

Antinincrodials Division (7510P)

SURNAME

DATE

CONCURRENCES

Antinincrodials Division (7510P)

EPA Form 1320-1A (1/90)

Printed on Recycled Paper

OFFICIAL FILE COPY

100.00%

Virkon® S
Disinfectant and Virucide

[BROAD SPECTRUM DISINIFECTANT,][FUNGICIDE] [& ALGAECIDE] OPT

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] [OPT]

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities [For Use in Emergency Disease Control] OPT]

Effective against

Viruses

Including Canine Parvovirus [OPT]

Bacteria

Fungi

**ACTIVE INGREDIENTS:** 

Potassium peroxymonosulfate. 21.41%

Sodium Chloride. 1.50% ACCEPTE
77.09%

TOTAL....

Equivalent to 9.75% Available Chlorine

KEEP OUT OF REACH OF CHILDREN DANGER/PELIGRO

[See Inside Booklet for Additional Precautions] [OPT] [See leaflet for additional directions for use] [OPT]

EPA Reg. No. 71654-6 EPA Est. No. XXXXX-YY-ZZZ

<Lot or batch #>

[POWDER FORM] [OPT]

[TABLET FORM] [OPT]

[SACHET FORM] [OPT]

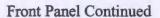
Copyright © 2006-2011 E. I. du Pont de Nemours and Company. All Rights Reserved.

Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a DuPont Company

Under the Federal Insecticide, Fungicide, and

Rodenticide, Act as amended, for the

pesticide, registered under EPA Reg. No. 7/6



If in Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.  Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.  Call a Poison Control Center or doctor for further treatment advice.
If on Skin or Clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for further treatment advice.
If Swallowed:	Call a Poison Control Center or doctor immediately for treatment advice.  Have person sip a glass of water if able to swallow.  Do not induce vomiting unless told to do so by the poison control center or doctor  Do not give anything by mouth to an unconscious person

#### HOT LINE NUMBER

For 24-hour emergency information on this product, call 1-800-441-3637 (US & Canada) or 1-302-774-1139 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for:
E.I. DuPont de Nemours and Company
PO Box 80402
Wilmington, DE 19880-0402
Questions? Call 1-800-441-7515
Outside the US, contact: 1-302-774-1000

US Patent No. 4822512

#### EFFECTIVE AGAINST THE FOLLOWING [PATHOGEN]: OPT

#### [ANIMAL AND ZOONOTIC PATHOGENS] OPT

#### **BACTERIA**

[Actinobacillus pleuropneumoniae] OPT

[Bacillus cereus] OPT

[Brucella abortus] OPT

[Campylobacter jejuni] OPT

[Clostridium perfringens]

[Dermatophilus congolensis]

[Escherichia coli]

[Klebsiella pneumoniae]

[Mycoplasma gallisepticum]

[Mycoplasma hyopneumonia]

[Pasteurella multocida] OPT

Pseudomonas aeruginosa

Salmonella enterica

Salmonella typhimurium

[Shigella sonnei] OPT

[taphylococcus aureus]

[Staphylococcus epidermidis]

[Streptococcus pyogenes]

[Streptococcus suis]

[Not approved in California for use against the following bacteria:]

[Bordetella avium]

[Bordetella bronchiseptica]

[Fistulous withers (Poll Evil)]

[Haemophilus somnus]

[Helicobacter pylori]

[Listeria monocytogenes]

[Moraxella bovis (Pink Eye)]

[Mycoplasma mycoides]

[Pseudomonas mallei (Glanders)]

[Pseudomonas vulgaris]

[Streptococcus equi (Strangles)]

[Taylorella equigenitalis]

[Treponema hyodysenteriae] OPT

#### **VIRUSES**

Avian Influenza Virus

[Avian Laryngotracheitis Virus] OPT

[Bovine Adenovirus Type 4]

[Canine Adenovirus (Canine Hepatitis)] OPT



[Canine Parvovirus] OPT

[Equine Herpes Virus (Type 1)]

[Equine Herpes Virus (Type 3)]

[Equine Influenza Virus (Type A)]

[Feline Calicivirus]

[Feline Panleukopenia Virus]

[Feline Rhinotracheitis Virus]

[Newcastle Disease Virus]

[Simian virus (SV40 Virus)]

[Not approved in California for use against the following viruses:]

[Adenovirus Pneumonia]

[African Horse Sickness Virus]

[African Swine Fever Virus (tested with 1% soil load and 342 ppm hard water)]

[Bovine Polyoma Virus]

[Bovine Pseudocowpox Virus]

[Bovine Viral Diarrhea Virus (no hard water)]

[Calf Rotavirus (no hard water)]

[Canine Coronavirus]

[Canine Parainfluenza Virus]

[Chicken Anemia Virus]

[Coital Exantherma Virus]

[Distemper Virus]

[Duck Adenovirus (no hard water)]

[Duck Enteritis Virus]

[Egg Drop Syndrome Adenovirus]

[Equine Infectious Anemia Virus (Swamp Fever)]

[Equine Arteritis Virus (no hard water)]

[Equine Contagious Abortion Virus]

[Equine Papillomatosis Virus]

[Equine Influenza Virus (The Cough)]

[Feline Herpes Virus]

[Feline Infectious Peritonitis Virus]

[Feline Parvovirus]

[Foot and Mouth Disease Virus]

[Hog Cholera Virus]

[Infectious Bronchitis Virus]

[Infectious Bursal Disease Virus]

[Infectious Canine Hepatitis Virus]

[Infectious Pancreatic Necrosis Virus]

[Infectious Salmon Anaemia Virus]

[Infective Bovine Rhinotracheitis Virus (no hard water)]

[Leptospira Canicola Virus]

[Maedi- Visna Virus]

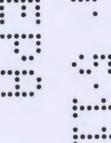
[Marek's Disease Virus]

[Mouse Parvovirus]

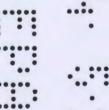
[PCV2 Virus (PMWS)]

[Porcine Parvovirus]

[Porcine Reproductive and Respiratory Syndrome Virus (PRRS)] OPT



6



[Pseudorabies Virus (Aujesky's Disease) (no hard water)] OPT

[Rotaviral Diarrhea Virus]

[Snakehead rhabdovirus]

[Swine Influenza Virus]

[Swine Vesicular Disease Virus]

[Transmissible Gastroenteritis Virus (TGE) (no hard water)]

[Turkey Herpes Virus (no hard water)]

[Turkey Rhinotracheitis Virus]

[Vesicular Stomatitis Virus]

#### [FUNGI]

[Trichophyton mentagrophytes (2%)]

[Not approved in California for use against the following fungi:]

[Aspergillus fumigatus]

[Fusarium moniliforme]

[Microsporum canis]

[Trichophyton spp. (Ringworm)]

[Trichophyton spp. (Mud Fever)]

#### [PLANT PATHOGENS]

[Not approved in California for use against plant pathogens:]

[Alternaria solani]

[Botrytis cinera]

[Colletotrichum coccodes]

[Didymella bryoniae]

[Fusarium oxysporum]

[Fusarium solani]

[Penicillium oxalicum]

[Phomopsis sclerotioides]

[Pyrenochaeta lycoopersici]

[Pythium aphanidermatium]

[Rhizoctonia solani]

[Sclerotinia sclerotiorum]

[Thielaviopsis basicola]

[Verticillium dahliae]

[Xanthomonas axonopodis] OPT

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use-diluted solution.



#### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### **BROAD SPECTRUM DISINFECTANT**

Virkon® S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts — Not Approved for this use in California), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."

[Respiratory illnesses attributable to Pandemic 2009 H1N1are caused by influenza A virus. Virkon® S [OPT] [Product Name] is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).] [OPT]

[This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus.] [OPT]

[This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 .... (formerly called swine flu).] [OPT]

[Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu).] [OP]

[Kills Pandemic 2009 H1N1 influenza A virus.] [OPT]

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

#### [Fogging (Wet Misting) Instructions –

All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging. Fogging is an adjunct or supplement to normal cleaning and disinfection procedures and practices.

Close room off, so fog is confined to room to be treated.

Prepare a Virkon® S dilution of 0.5% to 2.0% in water (1:200 to 1:50) - (refer to specific directions for Poultry, Swine, Bovine, Greenhouse and Aquaculture uses.).

Apply use-diluted solution at an application rate of 1 gallon per 430 ft2 of floor space. Use a mechanical or plumbed in misting system designed for water-based applications with a droplet size of greater than 50 microns, or a pressure washer/knapsack or tank sprayer to deliver fine mist. Insert the nozzle of the fogging device through a suitable opening in the room. Do not allow people to breathe or contact the fog or to enter the room until the fog has completely settled or exhausted. Do not house animals or use equipment until treatment has dried. Rinse waterers and feeders with potable water before reuse. Rinse foggers and sprayers with petable water following use.

Note: Individuals must avoid entering the building or room during fogging. If the building or room must be entered, then individuals entering must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long shirt sleeves, and pants.] OPT.

#### Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water.] OPT.

#### Powder

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces
1 Gallon	0.65 ounces*	1.3 ounces	2.7 ounces
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces
50 Gallons	33.4 ounces*	66.8 ounces	133.5 ounces

Measuring cup provided.

#### Tablet

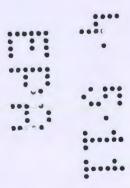
Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Pint		1 tablet	2 tablets
1 Quart	1 tablet*	2 tablets	4 tablets
1 Gallon	4 tablets*	8 tablets	16 tablets

#### Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]



#### [POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella enterica, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. Not approved in California for use against the following organisms: Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts – Not Approved for this use in California) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.] OPT.

[HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.] OPT.

[Fogging (Wet Misting) Instructions - Poultry and Ratite Production

Follow General Instructions to remove poultry and/or animals from room to be treated.

All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging. Fogging is an adjunct or supplement to normal cleaning and disinfection procedures and practices.

All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging. Fogging is an adjunct or supplement to normal cleaning and disinfection procedures and practices.

Close room off, so fog is confined to room to be treated.

Prepare a Virkon® S at dilution of 1.0% to 2.0% in water (1:100 to 1:50).

Apply at an application rate of 1 gallon per 430 ft2 of floor space. Use a mechanical or plumbed in misting system designed for water-based applications with a droplet size of greater than 50 microns, or a pressure washer/knapsack or tank sprayer to deliver fine mist. Insert the nozzle of the fogging device through a suitable opening in the room. Do not allow people to breathe or contact the fog or to enter the room until the fog has completely settled or exhausted. Do not house animals or use equipment until treatment has dried. Rinse waterers and feeders with potable water before reuse. Rinse foggers and sprayers with potable water following use.

Note: Individuals must avoid entering the building or room during fogging. If the building of room must be entered, then individuals entering must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long shirt sleeves, and pants.] OPT.

[BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with potable water. Do not house poultry or use equipment until treatment has dried.] OPT

[PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors. Saturate surfaces for a period of 10 minutes. Allow surfaces to air dry.] OPT.

#### [SWINE PRODUCTION] OPT.

[CONTROLS: Bacteria of; Actinobacillus Pleuropneumoniae and Clostridium perfringens; Fungi of Trichophyton mentragrophytes (2%). Not approved in California for use against the following organisms: Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme, Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.] OPT.

[Follow General Instructions to remove swine and preclean area to be treated. Use a 1% solution of Virkon® S for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.] OPT.

#### [Fogging (Wet Misting) --- Swine

Follow General Instructions to remove poultry and/or animals from room to be treated.

Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. *Not approved in California for fogging at dilutions less than 1%.* Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with potable water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

#### [EQUINE PRODUCTION] OPT.

[BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING AND DISINFECTING STABLES AND EQUIPMENT] OPT

[CONTROLS: Viruses of Equine herpes virus Type 1 and Type 3 and Equine Influenza. Bacteria of; Brucella abortus, Clostridium perfringens, Dermatophilus congolenisis (at 2%). Pseudomonas aeruginosa, Salmonella typhimurium and Staphylococcus aureus. Fungi of Trichophyton mentagrophytes (at 2%). Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme, Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial

Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).] OPT.

[APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Follow general instructions to remove animals from area to be treated. Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1% Virkon® S solution, saturating surfaces for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.]

[To Clean Blankets, Saddle Pads and Rugs: Not an approved use in California: Using a 1% solution of Virkon® S, Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue.] OPT

#### [BOVINE PRODUCTION] OPT.

[CONTROLS: Bovine Adenovirus Type 4; Fungi of Trichophyton mentragrophytes(2%). Not approved in California for use against the following organisms: Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.] OPT.

[Follow General Instructions to remove livestock and preclean area to be treated. Use a 1% solution of Virkon® S to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.] OPT.

#### [Fogging (Wet Misting) --- Bovine

Follow General Instructions to remove poultry and/or animals from room to be treated.

Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Not approved in California for fogging at dilutions less than 1%. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with petable water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

#### [COMPANION ANIMALS] OPT.

[CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. Fungi of Trichophyton mentragrophytes(2%). Not approved in California for use against the following organisms: Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.] OPT.

[APPLICATIONS: Use a 1% solution of Virkon® S as a "one step" cleaning and disinfecting procedure (Remove gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems] within [associated with] Veterinary Medical Hospitals, animal infectious disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.] OPT.

#### [GREENHOUSES AND HORTICULTURE] OPT.

[Virkon® S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. Not approved in California for use on ventilation and other equipment and water systems. It is not intended to directly affect agricultural production and must not be applied to plants, seeds, or soil. If necessary, remove or cover these items prior to use of the product.] OPT.

#### [For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution on surfaces that have not been pre-cleaned with water to remove organic deposits.
- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak fools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water.

Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.] OPT.

[For evaporative coolers: Not approved use in California: Treat existing algae and slime-contaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.] OPT.

[Virkon® S may also be used to disinfect irrigation tanks and lines. Not approved use in California: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.] OPT.

#### [Fogging (Wet Misting) Instructions - Greenhouse/Horticulture

[Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Not approved in California for fogging at dilutions less than 1%. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with potable water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

#### [AQUACULTURE] OPT.

[Not approved for this use in California] OPT.

[Virkon® S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon® S may also be used in foot dips. Virkon® S must not be applied directly to water.] OPT.

[Equipment used in separate sites, tanks, ponds in aquaculture settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon® S solution followed by a water rinse.] OPT.

#### [Fogging (Wet Misting) Instructions -- Aquaculture

Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

[EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)] OPT. [Not approved for this use in California] OPT.

[Disinfection helps to control and prevent the cross-contamination of OIE List A organisms including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newcastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia).] OPT.

[Use a 1% solution of Virkon® S to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins and containers).

Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments. Saturate surfaces for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time. ] OPT.

### [DISINFECTION LIMITED TO SPECIFIC AND KNOWN DISEASE ORGANISM PCV2 VIRUS

Not approved for this use in California

The instructions above call for use of a 1% solution for general disinfection. However, Virkon® S is an effective disinfectant for all hard, non-porous surfaces against the following organism at the dilution rates specified below. If the threat is known and limited to one of the organism below, Virkon® S may be used at the following dilution rates:] OPT

[Organism	Dilution	Oz./Gal.
	Rate	
PCV2 Virus (PMWS)	1:200	0.7] OPT

#### [USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS] OPT.

[Use a 1% solution of Virkon® S to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Virkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does not come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges or other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or

allowing people to contact treated sites.] OPT.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal PESTICIDE STORAGE:

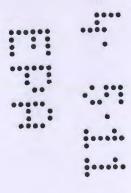
For pails, [jugs], [bottles]: Store in a cool dry place in tightly closed container. Keep out of reach of children. Always replace lid after use. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

For [sachet] [pouch] [packet] [bag]: Store in a cool dry place. Keep out of reach of children. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

[For spray bottle with in-use solution: Store in a cool dry place. Keep out of reach of children. Do not mix this product with other chemicals.]

PESTICIDE DISPOSAL: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. [Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.] Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.





# ED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

April 7, 2011

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

THOMAS C. MCENTEE
E.I. DUPONT DE NEMOURS AND COMPANY
DUPONT CHEMICAL SOLUTIONS ENTERPRISE
PO Box 80402
WILMINGTON, DE 19880-0402

PRODUCT NAME: VIRKON S

COMPANY NAME: E.I. DUPONT DE NEMOURS AND COMPANY

OPP IDENTIFICATION NUMBER: EPA FILE SYMBOL: 71654-6 EPA RECEIPT DATE: 04/05/11

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

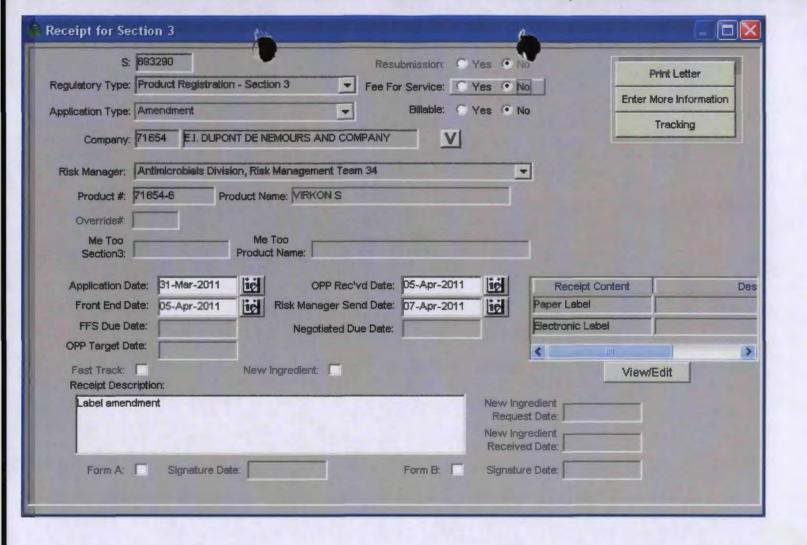
During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Antimicrobials Division, Risk Management Team 34, at (703) 308-6416.

Sincerely,

P. K. Morne

Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division



# Fee for Service

{893290,~

This package includes the following	for Division
New Registration	AD     BPPD
Amendment	∘RD
□ Studies? □ Fee Waiver? □ volpay % Reduction:	Risk Mgr. 34
Receipt No. S-	893290
EPA File Symbol/Reg. No.	71654-6
Pin-Punch Date:	4/5/2011
This item is NOT subject t	o FFS action.
Action Code:	Parent/Child Decisions:
Requested:	
Granted:	
Amount Due: \$	
Inert Cleared for Intended Use	Uncleared Inert in Product
Reviewer: Team	Date: 4/10/11
Remarks:	1 1

SEPA	Environmenta	United States al Protecti hington, DC 20			x	Registra Amenda Other		OPP Id	entifler	Number
		Applicati	on for Pesti	cide - Se	ction					
1. Company/Product Numb	rei			A Product Me			3. P	roposed C	lassifice	stion
71654-6 4. Company/Product (Name	-1		Jacq.				X	None		Restricted
Virkon(R) S	,,		34 .							
5. Name and Address of April E.I. du Pont de Nemours and Attn: Susan Schaner Dupont Chemicals & Fluoroph Wilmington, DE 19880-0402	Company	ode)	(b)(i), to: EPA	my product	t is sim	in accordar ilar or identi	cal in co	mpositio		
			Section -	- 11						
Amendment - Explain Resubmission in res Notification - Explain	ponse to Agency letter	r dated		Final print Agency le "Me Too" Other - Ex	Applica	ition.	to			
Amended labeling meeting of March 3	30, 2011. E-Lab				nmen	its letter c	ar July	15, 20	10 ar	10
Child-Resistant Packaging	Unit Packaging		Water Soluble	Packaging		2. Type of C	ontainer			
Yes No	X Yee No		X Yes No	Yes Metal						
* Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt 1.3 oz.	No. per containe 50			Paper Other (S	pecify)		
3. Location of Net Contents  X Label	Information Container	4. Size(s) Ret 10 lb., 4 l	tall Container lb, 1lb., 9 oz.	,	5. Loc	ation of Lebe	Directio	ns		
6. Manner in Which Label is	Affixed to Product	x Lithogr Paper Stencil	plued led	Othe	or					
			Section -							
1. Contact Point (Complete	items directly below for			be contected,	, if neces	1		-		
Name			Title			1	elephone	No. (Inci	ude Are	a Code)
	ments I have made on ny knowlingliy false or i law.		all attachments ti					6. Date Application Received (Stamped)		
Susan N. S	chane	2	3. Title Regulation	my Coos	Din	ater				
. Typed Name 5. Date			March 3	31, 20	11					

Virkon® S Disinfectant and Virucide

#### [BROAD SPECTRUM DISINIFECTANT,][FUNGICIDE] [& ALGAECIDE] OPT

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] [OPT]

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities [For Use in Emergency Disease Control] OPT]

Effective against

Viruses

Including Canine Parvovirus [OPT]

Bacteria

Fungi

**ACTIVE INGREDIENTS:** 

Potassium peroxymonosulfate	21.41%
Sodium Chloride	1.50%
OTHER INGREDIENTS	77.09%
TOTAL	100.00%

Equivalent to 9.75% Available Chlorine

KEEP OUT OF REACH OF CHILDREN DANGER/PELIGRO

[See Inside Booklet for Additional Precautions] [OPT] [See leaflet for additional directions for use] [OPT]

EPA Reg. No. 71654-6 EPA Est. No. XXXXX-YY-ZZZ

<Lot or batch #>

[POWDER FORM] [OPT]

[TABLET FORM] [OPT]

[SACHET FORM] [OPT]

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Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a Diffont Company



#### Front Panel Continued

FIRST AID	
If in Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.  Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.  Call a Poison Control Center or doctor for further treatment advice.
If on Skin or Clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for further treatment advice.
If Swallowed:	Call a Poison Control Center or doctor immediately for treatment advice.  Have person sip a glass of water if able to swallow.  Do not induce vomiting unless told to do so by the poison control center or doctor  Do not give anything by mouth to an unconscious person

#### HOT LINE NUMBER

For 24-hour emergency information on this product, call 1-800-441-3637 (US & Canada) or 1-302-774-1139 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

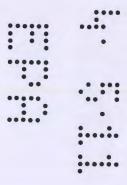
Manufactured for: E.I. DuPont de Nemours and Company

PO Box 80402 Wilmington, DE 19880-0402

Questions? Call 1-800-441-7515

Outside the US, contact: 1-302-774-1000

US Patent No. 4822512



#### EFFECTIVE AGAINST THE FOLLOWING [PATHOGEN]: OPT

#### [ANIMAL AND ZOONOTIC PATHOGENS] OPT

#### **BACTERIA**

[Actinobacillus pleuropneumoniae] OPT

[Bacillus cereus] OPT

[Brucella abortus] OPT

[Campylobacter jejuni] OPT

[Clostridium perfringens]

[Dermatophilus congolensis]

[Escherichia coli]

[Klebsiella pneumoniae]

[Mycoplasma gallisepticum]

[Mycoplasma hyopneumonia]

[Pasteurella multocida] OPT

Pseudomonas aeruginosa

Salmonella enterica

Salmonella typhimurium

[Shigella sonnei] OPT

[taphylococcus aureus]

[Staphylococcus epidermidis]

[Streptococcus pyogenes]

[Streptococcus suis]

[Not approved in California for use against the following bacteria:]

[Bordetella avium]

[Bordetella bronchiseptica]

]Fistulous withers (Poll Evil)]

[Haemophilus somnus]

[Helicobacter pylori]

[Listeria monocytogenes]

[Moraxella bovis (Pink Eye)]

[Mycoplasma mycoides]

[Pseudomonas mallei (Glanders)]

[Pseudomonas vulgaris]

[Streptococcus equi (Strangles)]

[Taylorella equigenitalis]

[Treponema hyodysenteriae] OPT

#### **VIRUSES**

Avian Influenza Virus
[Avian Laryngotracheitis Virus] OPT
[Bovine Adenovirus Type 4]
[Canine Adenovirus (Canine Hepatitis)] OPT



[Canine Parvovirus] OPT

[Equine Herpes Virus (Type 1)]

[Equine Herpes Virus (Type 3)]

[Equine Influenza Virus (Type A)]

[Feline Calicivirus]

[Feline Panleukopenia Virus]

[Feline Rhinotracheitis Virus]

[Newcastle Disease Virus]

[Simian virus (SV40 Virus)]

[Not approved in California for use against the following viruses:]

[Adenovirus Pneumonia]

[African Horse Sickness Virus]

[African Swine Fever Virus (tested with 1% soil load and 342 ppm hard water)]

[Bovine Polyoma Virus]

[Bovine Pseudocowpox Virus]

[Bovine Viral Diarrhea Virus (no hard water)]

[Calf Rotavirus (no hard water)]

[Canine Coronavirus]

[Canine Parainfluenza Virus]

[Chicken Anemia Virus]

[Coital Exantherma Virus]

[Distemper Virus]

[Duck Adenovirus (no hard water)]

[Duck Enteritis Virus]

[Egg Drop Syndrome Adenovirus]

[Equine Infectious Anemia Virus (Swamp Fever)]

[Equine Arteritis Virus (no hard water)]

[Equine Contagious Abortion Virus]

[Equine Papillomatosis Virus]

[Equine Influenza Virus (The Cough)]

[Feline Herpes Virus]

[Feline Infectious Peritonitis Virus]

[Feline Parvovirus]

[Foot and Mouth Disease Virus]

[Hog Cholera Virus]

[Infectious Bronchitis Virus]

[Infectious Bursal Disease Virus]

[Infectious Canine Hepatitis Virus]

[Infectious Pancreatic Necrosis Virus]

[Infectious Salmon Anaemia Virus]

[Infective Bovine Rhinotracheitis Virus (no hard water)]

[Leptospira Canicola Virus]

[Maedi- Visna Virus]

[Marek's Disease Virus]

[Mouse Parvovirus]

[PCV2 Virus (PMWS)]

[Porcine Parvovirus]

[Porcine Reproductive and Respiratory Syndrome Virus (PRRS)] OPT

[Pseudorabies Virus (Aujesky's Disease) (no hard water)] OPT

[Rotaviral Diarrhea Virus]

[Snakehead rhabdovirus]

[Swine Influenza Virus]

[Swine Vesicular Disease Virus]

[Transmissible Gastroenteritis Virus (TGE) (no hard water)]

[Turkey Herpes Virus (no hard water)]

[Turkey Rhinotracheitis Virus]

[Vesicular Stomatitis Virus]

#### [FUNGI]

[Trichophyton mentagrophytes (2%)]

[Not approved in California for use against the following fungi:]

[Aspergillus fumigatus]

[Fusarium moniliforme]

[Microsporum canis]

[Trichophyton spp. (Ringworm)]

[Trichophyton spp. (Mud Fever)]

#### [PLANT PATHOGENS]

[Not approved in California for use against plant pathogens:]

[Alternaria solani]

[Botrytis cinera]

[Colletotrichum coccodes]

[Didymella bryoniae]

[Fusarium oxysporum]

[Fusarium solani]

[Penicillium oxalicum]

[Phomopsis sclerotioides]

[Pyrenochaeta lycoopersici]

[Pythium aphanidermatium]

[Rhizoctonia solani]

[Sclerotinia sclerotiorum]

[Thielaviopsis basicola]

[Verticillium dahliae]

[Xanthomonas axonopodis] OPT

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use-diluted solution.

#### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### **BROAD SPECTRUM DISINFECTANT**

Virkon® S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts – Not Approved for this use in California), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."

[Respiratory illnesses attributable to Pandemic 2009 H1N1are caused by influenza A virus. Virkon® S [OPT] [Product Name] is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).] [OPT]

[This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus.] [OPT]

[This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).] [OPT]

[Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu).] [OPT]

[Kills Pandemic 2009 H1N1 influenza A virus.] [OPT]



#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

#### [Fogging (Wet Misting) Instructions –

All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging. Fogging is an adjunct or supplement to normal cleaning and disinfection procedures and practices.

Close room off, so fog is confined to room to be treated.

Prepare a Virkon® S dilution of 0.5% to 2.0% in water (1:200 to 1:50) - (refer to specific directions for Poultry, Swine, Bovine, Greenhouse and Aquaculture uses.).

Apply use-diluted solution at an application rate of 1 gallon per 430 ft2 of floor space. Use a mechanical or plumbed in misting system designed for water-based applications with a dropper size of greater than 50 microns, or a pressure washer/knapsack or tank sprayer to deliver fine mist. Insert the nozzle of the fogging device through a suitable opening in the room. Do not allow people to breathe or contact the fog or to enter the room until the fog has completely settled or exhausted. Do not house animals or use equipment until treatment has dried. Rinse waterers and feeders with potable water before reuse. Rinse foggers and sprayers with potable water following use.

Note: Individuals must avoid entering the building or room during fogging. If the building or room must be entered, then individuals entering must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long shirt sleeves, and pants.] OPT.

#### Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water.] OPT.

#### Powder

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces
1 Gallon	0.65 ounces*	1.3 ounces	2.7 ounces
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces
50 Gallons	33.4 ounces*	66.8 ounces	133.5 ounces

Measuring cup provided.

#### **Tablet**

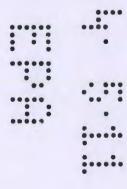
Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Pint		1 tablet	2 tablets
1 Quart	1 tablet*	2 tablets	4 tablets
1 Gallon	4 tablets*	8 tablets	16 tablets

#### Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]



#### [POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella enterica, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. Not approved in California for use against the following organisms: Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts – Not Approved for this use in California) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.] OPT.

[HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.] OPT.

[Fogging (Wet Misting) Instructions - Poultry and Ratite Production

Follow General Instructions to remove poultry and/or animals from room to be treated.

All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging. Fogging is an adjunct or supplement to normal cleaning and disinfection procedures and practices.

All surfaces must be cleaned and disinfected in accordance with label directions prior to fogging. Fogging is an adjunct or supplement to normal cleaning and disinfection procedures and practices.

Close room off, so fog is confined to room to be treated.

Prepare a Virkon® S at dilution of 1.0% to 2.0% in water (1:100 to 1:50).

Apply at an application rate of 1 gallon per 430 ft2 of floor space. Use a mechanical or plumbed in misting system designed for water-based applications with a droplet size of greater than 50 microns, or a pressure washer/knapsack or tank sprayer to deliver fine mist. Insert the nozzle of the fogging device through a suitable opening in the room. Do not allow people to breathe or contact the fog or to enter the room until the fog has completely settled or exhausted. Do not house animals or use equipment until treatment has dried. Rinse waterers and feeders with potable water before reuse. Rinse foggers and sprayers with potable water following use.

Note: Individuals must avoid entering the building or room during fogging. If the building or room must be entered, then individuals entering must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long shirt sleeves, and pants.] OPT.



[BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with potable water. Do not house poultry or use equipment until treatment has dried.] OPT

[PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors. Saturate surfaces for a period of 10 minutes. Allow surfaces to air dry.] OPT.

#### [SWINE PRODUCTION] OPT.

[CONTROLS: Bacteria of; Actinobacillus Pleuropneumoniae and Clostridium perfringens; Fungi of Trichophyton mentragrophytes (2%). Not approved in California for use against the following organisms: Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme, Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.] OPT.

[Follow General Instructions to remove swine and preclean area to be treated. Use a 1% solution of Virkon® S for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.] OPT.

#### [Fogging (Wet Misting) --- Swine

Follow General Instructions to remove poultry and/or animals from room to be treated.

Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Not approved in California for fogging at dilutions less than 1%. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with potable water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

[EQUINE PRODUCTION] OPT.

[BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING. AND DISINFECTING STABLES AND EQUIPMENT] OPT

[CONTROLS: Viruses of Equine herpes virus Type 1 and Type 3 and Equine Influenza.

Bacteria of; Brucella abortus, Clostridium perfringens, Dermatophilus congolenisis (at 2%).

Pseudomonas aeruginosa, Salmonella typhimurium and Staphylococcus aureus. Fungi of

Trichophyton mentagrophytes (at 2%). Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme, Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial

Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).] OPT.

[APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Follow general instructions to remove animals from area to be treated. Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1% Virkon® S solution, saturating surfaces for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.]

[To Clean Blankets, Saddle Pads and Rugs: Not an approved use in California: Using a 1% solution of Virkon® S, Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue.] OPT

#### [BOVINE PRODUCTION] OPT.

[CONTROLS: Bovine Adenovirus Type 4; Fungi of Trichophyton mentragrophytes(2%). Not approved in California for use against the following organisms: Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.] OPT.

[Follow General Instructions to remove livestock and preclean area to be treated. Use a 1% solution of Virkon® S to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments. Saturate surfaces with a 1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.] OPT.

#### [Fogging (Wet Misting) --- Bovine

Follow General Instructions to remove poultry and/or animals from room to be treated.

Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Not approved in California for fogging at dilutions less than 1%. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with potable water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

#### [COMPANION ANIMALS] OPT.

[CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. Fungi of Trichophyton mentragrophytes(2%). Not approved in California for use against the following organisms: Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.] OPT.

[APPLICATIONS: Use a 1% solution of Virkon® S as a "one step" cleaning and disinfecting procedure (Remove gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems] within [associated with] Veterinary Medical Hospitals, animal infectious disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles. Saturate surfaces with a

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.] OPT.

1% solution of Virkon® S with a cloth, mop, mechanical spray, or sponge for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.

#### [GREENHOUSES AND HORTICULTURE] OPT.

[Virkon® S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. Not approved in California for use on ventilation and other equipment and water systems. It is not intended to directly affect agricultural production and must not be applied to plants, seeds, or soil. If necessary, remove or cover these items prior to use of the product.] OPT.

#### [For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution on surfaces that have not been pre-cleaned with water to remove organic deposits.
- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak tools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.] OPT.

[For evaporative coolers: Not approved use in California: Treat existing algae and slimecontaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.] OPT.

[Virkon® S may also be used to disinfect irrigation tanks and lines. Not approved use in California: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.] OPT.

#### [Fogging (Wet Misting) Instructions – Greenhouse/Horticulture

[Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Not approved in California for fogging at dilutions less than 1%. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with potable water following use. Refer to Fogging (Wet Misting instructions)]. OPT.

#### [AQUACULTURE] OPT.

[Not approved for this use in California] OPT.

[Virkon® S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon® S may also be used in foot dips. Virkon® S must not be applied directly to water.] OPT.

Equipment used in separate sites, tanks, ponds in aquaculture settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon® S solution followed by a water rinse.] OPT.

#### [Fogging (Wet Misting) Instructions -- Aquaculture

Use a 0.5% -1.0% solution of Virkon® S for fogging (wet misting) operations as a supplemental measure after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use. Refer to Fogging (Wet Misting instructions)]. OPT

[EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)] OPT. [Not approved for this use in California] OPT.

Disinfection helps to control and prevent the cross-contamination of OIE List A organisms.... including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newbastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia).] OPT.



[Use a 1% solution of Virkon® S to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins and containers).

Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments. Saturate surfaces for a period of 10 minutes. Allow surfaces to air dry. Rinse waterers and feeders with potable water before reuse.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time. ] OPT.

## [DISINFECTION LIMITED TO SPECIFIC AND KNOWN DISEASE ORGANISM PCV2 VIRUS

Not approved for this use in California

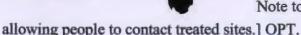
The instructions above call for use of a 1% solution for general disinfection. However, Virkon® S is an effective disinfectant for all hard, non-porous surfaces against the following organism at the dilution rates specified below. If the threat is known and limited to one of the organism below, Virkon® S may be used at the following dilution rates:] OPT

[Organism	Dilution	Oz./Gal.
	Rate	
PCV2 Virus (PMWS)	1:200	0.7] OPT

#### [USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS] OPT.

[Use a 1% solution of Virkon® S to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Wirkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does not come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges or other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or



#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal

PESTICIDE STORAGE:

For pails, [jugs], [bottles]: Store in a cool dry place in tightly closed container. Keep out of reach of children. Always replace lid after use. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

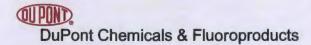
For [sachet] [pouch] [packet] [bag]: Store in a cool dry place. Keep out of reach of children. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

[For spray bottle with in-use solution: Store in a cool dry place. Keep out of reach of children. Do not mix this product with other chemicals.]

PESTICIDE DISPOSAL: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. [Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.] Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.





March 31, 2011

Antimicrobials Division (7510P)
US Environmental Protection Agency
Office of Pesticide Programs; Room S-4900
Ms. Jacqueline Campbell-McFarlane (PM34)
2777 South Crystal Drive
Arlington, VA 22202-4501

Subject: Virkon® S; EPA Registration No. 71654-6 Application to Amend Labeling

Dear Ms. Campbell-McFarlane,

Please consider this letter and attachments as our application to amend the subject registration to upgrade labeling for the subject product. Labeling has been revised in accordance with the requirements of your July 15, 2010 accepted-with comments letter, excepting the following changes which were agreed to during the March 30, 2011 meeting at your office attended by yourself, Ms. Stacey Grigbsy, Mr. Mark Hartman and Mr. Thomas McEntee (DuPont).

- 1) The Fogging (Wet Misting) Instructions are revised by deleting the statement, "Follow General Instruction ... to be treated." Also, the dilution rate has been changed to 0.5%-2.0% (with comment in parentheses to refer to specific dilution directions by end-user application).
- 2) The various animal housing facilities (poultry/swine/equine/bovine) directions have been modified to include the statement, "Follow General Instructions to remove poultry and/or animals from room to be treated."
- 3) We agreed that the phrase, "may be" under the "Pesticide Disposal" section was acceptable.
- 4) The "Blankets, Saddle Pads, and Rugs" heading has been revised by indicating "To Clean Blankets, Saddle Pads, and Rugs."
- 5.) The term, "animal," has been added to clarify the use site, "infectious disease, wards."
- 6.) The statement, "Disinfection helps to control and prevent the spread of OIE List A organisms" has been revised to read: "Disinfection helps to control and prevent the cross contamination of OIE List A organisms".

Should you have any questions, feel free to call me at 302.695.2328 or e-mail me at susan.m.schaner@usa.dupont.com.

Sincerely,

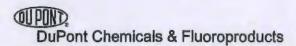
Susan M. Schaner

Regulatory Coordinator

DuPont Chemicals & Fluoroproducts

Enclosures

DuPont Chemicals & Fluoroproducts P. O. Box 80402 Wilmington, DE 19880-0402



March 31, 2011

Antimicrobials Division (7510P)
US Environmental Protection Agency
Office of Pesticide Programs; Room S-4900
Ms. Jacqueline Campbell-McFarlane (PM34)
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Sincerely,

Susan M. Schaner

Regulatory Coordinator

DuPont Chemicals & Fluoroproducts

Enclosures

#### TRANSMITTAL DOCUMENT

#### Attention:

Antimicrobials Division (7510P)
Ms. Jacqueline Campbell-McFarlane
US Environmental Protection Agency
Office of Pesticide Programs
2777 South Crystal Drive
Arlington, VA 22202-4501

#### NAME AND ADDRESS OF SUBMITTER

E. I. du Pont de Nemours and Company DuPont Chemicals & Fluoroproducts Experimental Station (ESL402/3224D) P. O. Box 80402 Wilmington, DE 19880-0402

REGULATORY ACTION IN SUPPORT OF WHICH THIS PACKAGE IS SUBMITTED-

### Amended labeling

"Virkon®" S; EPA Registration No. 71654-6

Transmittal Date: March 31, 2011

#### **Transmittal Material:**

Volume 1	Administrative Materials	
	-Cover Letter	2 pages
	-Application for Pesticide Registration (EPA Form 8570-1)	1 page
	-Transmittal Document	this page
	-Certification with Respect to Label Integrity	1 page
	-Printed Labeling	15 pages
	-Highlighted Label Indicating Changes	15 pages
	-071654-00006.20110331.Virkon S.pdf	1 CD





# United States

Registration

**OPP Identifier Number** 

WEPA	Environmenta Washi	Il Protection ington, DC 204		X	Amenda Other	ment		
		Application	on for Pesticide	- Section	ı			
1. Company/Product Number 71654-6	)P			duct Manager Campbell-McF	arlane	1 5 3	None Restricted	
4. Company/Product (Name Virkon(R) S	)		PM# 34	PM#				
5. Name and Address of Ap E.I. du Pont de Nemours and ( Attn: Susan Schaner Dupont Chemicals & Fluoropro Wilmington, DE 19880-0402  Check if this	Company	nde)	(b)(i), my p	. No	ilar or ident	tical in com	IFRA Section 3(c)(3) position and labeling	
			Section - II					
X Amendment - Explain Resubmission in results   Notification - Explain Explanation: Use addition Amended labeling meeting of March 3	n below.  nal page(s) if necessar	ry. (For section	ot I and Section II.)	nel printed lebel gency letter det de Too" Applica ther - Explain be	etion.		5, 2010 and	
			Section - III					
1. Meterial This Product Wi	1		1					
Child-Resistent Packeging Yes No * Cartification must	Unit Packaging  X Yee No  If "Yes" Unit Packaging wgt.	No. per		No. per container	2. Type of X	Metal Plastic Glass Paper Other (Sp	ecify)	
be submitted 3. Location of Net Contents		4. Size(s) Ret	1.3 oz.	50	cation of Lat			
1.1			lb, 1lb., 9 oz.,	-X		oei Direction		
6. Manner in Which Label is	Affixed to Product	x Lithog Paper Stenci	reph glued iled	Other				
			Section - IV					
1. Contact Point  Complete	items directly below	for identification	n of individual to be co	intacted, If nec	essery, to pr	ocess this a	pplication.)	
Name			Title			Telephone	No. (Include Area Code)	
	ny knowlinglly false or		ation all attachments therete eternent may be punish			mplete.	6. Dete Application Received (Stamped)	
2. Signature  Susan N. A.	chane		3. Title Regulatory	Cordi	nator	•	• • •	
4. Typed Name Susan M. Schaner			March 31, 2011					

### Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL					
EPA Registration #	Date Submitted to EPA	Electronic file name			
71654-6	March 31, 2011	071654-00006.20110331.Virkon S.pdf			

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

March 31, 2011

Date

Signature

Susan M. Schaner

Name (typed)

Regulatory Coordinator

Title

### Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

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EPA Registration #	Date Submitted to EPA	Electronic file name			
71654-6	March 31, 2011	071654-00006.20110331.Virkon S.pdf			

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March 31, 2011

Date

Signature

Susan M. Schaner

Name (typed)

Regulatory Coordinator

Title

Antimicr al Division/Regulatory Management I hches I/II



A	Completed by Product Manager							
PRODUCT RE	RODUCT REVIEWER: Juan Negron							
Description of	Action: Notifica	ation		EPA File Symbol/Reg No.: 71654-6				
FQPA Action (	Code: 332	Non-FQPA	Action Co	de:	Fee for Servi	ce Ac	tion Code:	
Decision No.	43727	Submission l	No. 878	Fee for Service Fee: \$				
		MON	TH	DAY	YEAR			
APPLICATION	N DATE	7		1			2010	
EPA PIN DAT	E	7		6			2010	
REVIEWER A	SSIGNED DATE	7		16			2010	
DATE DUE TO	PM						2010	
DATE DUE OU	JT OF AGENCY						2010	
Type of Data:	Product Chemistry	Acute Toxicology	Efficacy	Environmental Fate	Ecologica Effects	0	Chronic Toxicology	Exposure
Notification - section	- Adding "Do r	not contaminate	water, foo	od, and feed by stor	rage and disp	osal'	' to "Storage ar	nd Disposal"
ATTACHME	NTS:	x LABELII	NG	CSFs			ATA _	OTHER
В			For Arct	ic Slope Contract	Only			
Contractor: A	arctic Slope			Contract No.: TOPO/Alt. TOPO:				
Draft Task: Signature (Est. hrs)				Final Task: Signature(Total hrs)				
C				Reviewers Com	ments:			
Response Code:				Response Date: 8/5/2010				



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

AUG - 5 2010

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Ms. Susan M. Schaner Regulatory Coordinator **DuPont Chemicals and Fluoroproducts** P.O. Box 80402 Wilmington, DE 19880-0402

Subject:

Product Name:

Virkon® S

**EPA Registration No.:** 

71654-6

Notification Date:

July 1, 2010

EPA Receipt Date:

July 6, 2010

Dear Susan M. Schaner,

This letter acknowledges receipt of your notification submitted under the provision of FIFRA section 3(c) 9 and PR Notice 98-10.

### **Proposed Notification**

• Updating the "Storage and Disposal" section.

#### **General Comments**

Based on a review of the submitted materials, your notification to add "Do not contaminate water, food, or feed by storage and disposal" statement is acceptable and apart of the records on file.

Should you have any questions of comments concerning this letter, please contact (Juan F. Negrón) at (703-308-8116).

Sincerely

			CONCURRENC	equet Manag	er (34)		
SYMBOL				egulatory Ma			
SURNAME	***************************************	S'A	А	atimicrobials	Division (73	UP)	************
DATE		1			*************		
						OFFICE	AL FILE COPY

## Virkon® S Disinfectant and Virucide

### BROAD SPECTRUM DISINIFECTANT, FUNGICIDE & ALGAECIDE [OPT]

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] [OPT]

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities
For Use in Emergency Disease Control [OPT]

Effective against
•Viruses
Including Canine Parvovirus [OPT]
•Bacteria
•Fungi



**ACTIVE INGREDIENTS:** 

Potassium peroxymonosulfate	21.41%
Sodium Chloride	1.50%
OTHER INGREDIENTS	77.09%
TOTAL	100.00%

Equivalent to 9.75% Available Chlorine

# DANGER/PELIGRO

See Inside Booklet for Additional Precautions [OPT]
See leaflet for additional directions for use [OPT]

POWDER FORM [OPT]

TABLET FORM [OPT]

SACHET FORM [OPT]

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Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a Bullon Company

EPA Reg. No. 71654-6

EPA Est. No. XXXXX-YY-ZZZ

<Lot or batch #>

#### Front Panel Continued

FIRST AID					
If in Eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>				
If on Skin or Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control Center or doctor for further treatmen advice.</li> </ul>				
If Swallowed:	<ul> <li>Call a Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person</li> </ul>				

#### HOT LINE NUMBER

For 24-hour emergency information on this product, call 1-800-441-3637 (US & Canada) or 1-302-774-1139 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for:
E.I. DuPont de Nemours and Company
PO Box 80023
Wilmington, DE 19880-0023
Questions? Call 1-800-441-7515
Outside the US, contact: 1-302-774-1000

US Patent No. 4822512



#### **EFFECTIVE AGAINST THE FOLLOWING PATHOGENS:**

#### ANIMAL AND ZOONOTIC PATHOGENS

#### BACTERIA

Actinobacillus pleuropneumoniae

Bacillus cereus Brucella abortus

Campylobacter jejuni

Clostridium perfringens

Dermatophilus congolensis

Escherichia coli

Klebsiella pneumoniae

Mycoplasma gallisepticum

Pasteurella multocida

Pseudomonas aeruginosa

Salmonella enterica

Salmonella typhimurium

Shigella sonnei

Staphylococcus aureus

Staphylococcus epidermidis

Streptococcus pyogenes

Streptococcus suis

Not approved in California for use against

the following bacteria:

Bordetella avium

Bordetella bronchiseptica

Fistulous withers (Poll Evil)

Haemophilus somnus

Helicobacter pylori

Listeria monocytogenes

Moraxella bovis (Pink Eye)

Mycoplasma hyopneumonia

Mycoplasma mycoides

Pseudomonas mallei (Glanders)

Pseudomonas vulgaris

Streptococcus equi (Strangles)

Taylorella equigenitalis

Treponema hyodysenteriae

#### VIRUSES

Avian Influenza Virus

Avian Laryngotracheitis Virus

Bovine Adenovirus Type 4

Canine Adenovirus (Canine Hepatitis)

Canine Parvovirus

Equine Herpes Virus (Type 1)

Equine Herpes Virus (Type 3)

Equine Influenza Virus (Type A)

Feline Calicivirus

Feline Panleukopenia Virus

Feline Rhinotracheitis Virus

Newcastle Disease Virus

Simian virus (SV40 Virus)

Not approved in California for use against

the following viruses:

Adenovirus Pneumonia

African Horse Sickness Virus

African Swine Fever Virus (tested with 1%

soil load and 342 ppm hard water)

Bovine Polyoma Virus

Bovine Pseudocowpox Virus

Bovine Viral Diarrhea Virus (no hard water)

Calf Rotavirus (no hard water)

Canine Coronavirus

Canine Parainfluenza Virus

Chicken Anemia Virus

Coital Exantherma Virus

Distemper Virus

Duck Adenovirus (no hard water)

**Duck Enteritis Virus** 

Egg Drop Syndrome Adenovirus

Equine Infectious Anemia Virus (Swamp

Fever)

Equine Arteritis Virus (no hard water)

Not approved in California cont.

**Equine Contagious Abortion Virus** 

Equine Papillomatosis Virus

Equine Influenza Virus (The Cough)

Feline Herpes Virus

Feline Infectious Peritonitis Virus

Feline Parvovirus

Foot and Mouth Disease Virus

Hog Cholera Virus

Infectious Bronchitis Virus

Infectious Bursal Disease Virus

Infectious Canine Hepatitis Virus

Infectious Pancreatic Necrosis Virus

Infectious Salmon Anaemia Virus

Infective Bovine Rhinotracheitis Virus (no

hard water)

Leptospira Canicola Virus

Maedi- Visna Virus

Marek's Disease Virus

Mouse Parvovirus

PCV2 Virus (PMWS)

Porcine Parvovirus

Porcine Reproductive and Respiratory

Syndrome Virus (PRRS)

Pseudorabies Virus (Aujesky's Disease) (no

hard water)

Rotaviral Diarrhea Virus

Snakehead rhabdovirus

Swine Influenza Virus

Swine Vesicular Disease Virus

Transmissible Gastroenteritis Virus (TGE)

(no hard water)

Turkey Herpes Virus (no hard water)

Turkey Rhinotracheitis Virus

Vesicular Stomatitis Virus

#### **FUNGI**

Trichophyton mentagrophytes (2%)

Not approved in California for use against the following fungi:
Aspergillus fumigatus
Fusarium moniliforme
Microsporum canis
Trichophyton spp. (Ringworm)
Trichophyton spp. (Mud Fever)

#### PLANT PATHOGENS

Not approved in California for use against plant pathogens:

Alternaria solani
Botrytis cinera
Colletotrichum coccodes
Didymella bryoniae
Fusarium oxysporum
Fusarium solani
Penicillium oxalicum
Phomopsis sclerotioides

Pyrenochaeta lycoopersici Pythium aphanidermatium Rhizoctonia solani Sclerotinia sclerotiorum Thielaviopsis basicola Verticillium dahliae Xanthomonas axonopodis

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER.** Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use-diluted solution.

#### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### **BROAD SPECTRUM DISINFECTANT**

Virkon® S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts – *Not Approved for this use in California*), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."

Respiratory illnesses attributable to Pandemic 2009 H1N1 are caused by influenza A virus. Virkon® S [OPT] [Product Name] is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu). [OPT]

This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus. [OPT]

This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu). [OPT]

Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu). [OPT]

Kills Pandemic 2009 H1N1 influenza A virus. [OPT]

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

#### Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water. OPT]

#### Powder

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces
1 Gallon	0.65 ounces*	1.3 ounces	2.7 ounces
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces
50 Gallons	33.4 ounces*	66.8 ounces	133.5 ounces

Measuring cup provided.

#### Tablet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Pint		1 tablet	2 tablets
1 Quart	1 tablet*	2 tablets	4 tablets
1 Gallon	4 tablets*	8 tablets	16 tablets

#### Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]

#### POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella enterica, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. *Not approved in California for use against the following organisms:* Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts – *Not Approved for this use in California*) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.

HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes.

Virkon® S at 1-2% solution is recommended for use in fogging (wet misting) operations as a supplemental measure, either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with water. Do not house poultry or use equipment until treatment has dried.

FOR AIR SANITIZING: Not approved for this use in California: Use Virkon® S at 0.5-1% solution and fog until surfaces are moist. Allow at least 2 hours before entering treated area. Rinse foggers and sprayers with water following use.

PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors.

#### **SWINE PRODUCTION**

CONTROLS: Bacteria of Actinobacillus Pleuropneumoniae and Clostridium perfringens. *Not approved in California for use against the following organisms:* Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme, Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.

Follow General Instructions to remove swine and preclean area to be treated. Virkon® S at 1% solution is recommended for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. *Not approved in California for fogging at dilutions less than 1%*. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

#### **EQUINE PRODUCTION**

BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING AND DISINFECTING STABLES, EQUIPMENT AND AERIAL DISINFECTION

CONTROLS: Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme, Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).

APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1% Virkon® S solution. Rinse with clean water.

Blankets, Saddle Pads and Rugs: *Not an approved use in California*: Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue.

Aerial Spraying to control airborne diseases: *Not an approved use in California*: Use a hand or knapsack sprayer with fine setting, or an automatic spraying system. Spray a 1% Virkon® S solution for 2-3 minutes twice daily, first thing in the morning and last thing at night. Rinse sprayers with water after use.

#### **BOVINE PRODUCTION**

CONTROLS: Bovine Adenovirus Type 4. Not approved in California for use against the following organisms: Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.

Follow General Instructions to remove livestock and preclean area to be treated. A 1% solution of Virkon® S is recommended to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments.

#### **COMPANION ANIMALS**

CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. *Not approved in California for use against the following organisms:* Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.

APPLICATIONS: A 1% solution of Virkon® S is recommended as a "one step" cleaning and disinfecting procedure (Remove Gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems] within [associated with] Veterinary Medical Hospitals, infectious disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

#### GREENHOUSES AND HORTICULTURE

Virkon® S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. *Not approved in California for use on ventilation and other equipment and water systems*. It is not intended to directly affect agricultural production and must not be applied to plants, seeds, or soil. If necessary, remove or cover these items prior to use of the product.

For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution on surfaces that have not been pre-cleaned with water to removed organic deposits.

- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak tools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.

For evaporative coolers: *Not approved use in California*: Treat existing algae and slime-contaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.

Virkon® S may also be used to disinfect irrigation tanks and lines. *Not approved use in California*: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

### **AQUACULTURE**

Not approved for this use in California

Virkon<sup>®</sup> S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon<sup>®</sup> S may also be used in foot dips. Virkon<sub>®</sub> S must not be applied directly to water.

Equipment used in separate sites, tanks, ponds in aquacultural settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon<sub>®</sub> S solution followed by a water rinse.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

#### EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)

Not approved for this use in California

CONTROLS: OIE List A Disease organisms including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newcastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia). (OPT.)

A 1% solution of Virkon® S is recommended to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins and containers).

Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

## DISINFECTION LIMITED TO SPECIFIC AND KNOWN DISEASE ORGANISMS Not approved for this use in California

The instructions above call for use of a 1% solution for general disinfection, however, Virkon® S is effective against the following disease organisms at the dilution rates specified below. If the threat is known and limited to one of the organisms below, Virkon® S may be used at the following dilution rates:

Disease Organism	Dilution Rate	Oz./Gal.
PCV2 Virus (PMWS)	1:200	0.7

#### USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS

A 1% solution of Virkon® S is recommended to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Virkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does <u>not</u> come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges or other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or allowing people to contact treated sites.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

#### **PESTICIDE STORAGE:**

For pails, [jugs], [bottles]: Store in a cool dry place in tightly closed container. Keep out of reach of children. Always replace lid after use. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

<u>For [sachet] [pouch] [packet] [bag]</u>: Store in a cool dry place. Keep out of reach of children. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

[For spray bottle with in-use solution: Store in a cool dry place. Keep out of reach of children. Do not mix this product with other chemicals.]

<u>PESTICIDE DISPOSAL</u>: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. [Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.] Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.



**DuPont Chemicals and Fluoroproducts** 

July 1, 2010

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Jacqueline McFarlane
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

SUBJECT: Virkon® S, EPA Registration Number 71654-6

Notification of master label upgrade per PR Notice 98-10

Dear Ms. McFarlane,

Please consider this letter and its enclosures as a notification to upgrade the master label for the above referenced product. On page 14 of the enclosed master label, we are adding the following:

> "Do not contaminate water, food, and feed by storage and disposal."

Enclosed please find the following documents supporting this notification:

> Completed application for Pesticide Registration (EPA form 8570-1) – dated July 1, 2010

> Two copies of the master label (one with corrections highlighted) (14 pages ea)

> One CD with Master e-label, 071654.00006.20100701.MasterVirkonS.Upgraded.pdf

Should you have any questions, please feel free to call me at (302)695-2328 or email susan.m.schaner@usa.dupont.com.

Sincerely,

Susan M. Schaner

Regulatory Coordinator

Susan M. School

**DuPont Chemicals and Fluoroproducts** 

Enclosures

EPA Er	United States  vironmental Protection Agency  Washington, DC 20460	- American		P Identifier Number		
	Application for Pe	sticide - Section				
1. Company/Product Number 71654-6 4. Company/Product (Name) Virkon S 5. Name and Address of Applicant E.I. du Pont de Nemours and C DuPont Chemical Solutions En P.O. Box 80402 (E403-3224D)	2. EPA   Jacque   PM#	6. Expedited Review. In accordance with FIFRA Section 3((b)(I), my product is similar or identical in composition and la				
Wilmington, DE 19880-0402 Attn: Susan M. Schaner  Check if this is a new	Produc	t Name		_		
CHOCK II this is a new	Section	on - II				
Notification of master label upgrade pe This notification is consistent with the onfidential statement of formulas for th	provisions of PR Notice 98-10 and EPA regulate product. I understand that it is a violation of consistent with the terms of PR Notice 98-10 a	ions at 40 CFR 152.46, and 18 U.S.C. Sec. 1001 to will	no other changes have been π fully make any false statement	to EPA. I further		
	Section	n - III				
1. Material This Product Will Be Formula Child-Resistant Packaging Yes* No  *Certification must	Vackaged In:  Unit Packaging  Yes  No  If "Yes"  Unit Packaging wgt.  No. per  Container	Water Soluble Packa Yes No If "Yes" Package wgt.	No. per Glass Pape	ic s er		
3. Location of Net Contents Inform  Label Co	nation 4. Size(s) Retail Contain		5. Location of Label Direct	••••		
6. Manner in Which Label is Affix	ed to Product Lithograph Paper glued Stenciled	Other		***		
	Section	n - IV		•••		
Contact Point (Complete items     Name     Susan M. Schaner	directly below for identification of individual Title Regulatory C		• • Telephone	atioe). Ion (Indiude Area Code 12) 695-2328		
I certify that the statements I have acknowledge that any knowingly f under applicable law.	Certification made on this form and all attachments the alse or misleading statement may be punis	ereto are true, accurate an hable by fine or imprison	nd complete. I	exe Application eccived (Stamped)		

Regulatory Coordinator
5. Date
1-Jul-2010

2. Signature

4. Typed Name

Susan M. Schaner

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete

White- EPA File Copy (original) Yellow- Applicant Copy

## There is an ELECTRONIC LABEL for this action

You can use Acrobat to compare the e-label to the previous version (and find the changes). You can also use Acrobat to mark-up the e-label with your comments.

If e-label was submitted via

### **CD-ROM** with paper application

then you will find e-label in

### **Electronic Label Library**

If the e-label is not found in the ELL then it was probably not named correctly and could not be entered into the ELL. However, the file can be retrieved from the CD which is retained by the Front End.

or

If e-label was submitted via

### XML E-Submission (no paper)

then you will find e-label in

**Documentum** 

See overview of processing e-labels on other side of this sheet.

If you have any questions on e-labels, please contact one of your division e-label experts:

AD	vville Abriey	300-1009		
	Renae Whitaker	308-7003		
	Tracy Lantz	308-6415		
BPPD				
RD	Tom Harris	308-9423		
			***.:	
			••••	
			••••	

# Material to be added to an Jacket/Jacket

Reg. No. 71654-6

Descri	ption:
1. 🗆	Placement within the e-Jacket/jacket:
	☐ Default: (chronological, top = newest)
	☐ File Location: (PDF page number, i.e., "before page 45")
	,
2.	Send to Data Extraction contractors this material:
/	□ Newly stamped accepted label
	Notification
	□ New CSF
	Other:
must Then	tach this coversheet to the top of the material or jacket. It be well organized and clipped together, NOT STAPLED. give the material with this coversheet to staff in the mation Services Center (Room S-4900).
Rev	iewer's Name: Stacy Sugily
Pho	ne: Division:
Dat	e: 5/21/2010



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460



OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MAY 2 1 2010

Susan M. Schaner **Du Pont Chemicals and Fluoroproducts**P.O. Box 80402

Wilmington, DE 19880-0402

Subject:

Virkon® S

EPA Registration No.: 71654-6 Application Date: April 12, 2010 Receipt Date: April 21, 2010

Dear Ms. Schaner:

This acknowledges receipt of your notification, submitted under the provision of PR Notice 98-10, FIFRA section 3(c) 9.

#### **Proposed Notification:**

- Updating Storage and Disposal Update PR Notice 2007-4
- Update Directions for Use

#### **General Comment:**

Based on a review of the material submitted, the following comment applies:

A copy of the accepted notification has been inserted in your file for future reference.

Should you have any questions or comments concerning this letter, you may contact me by telephone at (703) 308-6416 or by e-mail at <a href="mailto:campbell-mcfarlane.jacqueline@epa.gov">campbell-mcfarlane.jacqueline@epa.gov</a> or Stacey Grigsby by telephone at (703) 305-6440 or by e-mail at <a href="mailto:grigsby.stacey@epa.gov">grigsby.stacey@epa.gov</a> epa.gov during the hours of 8:00am to 4:00pm EST. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely.

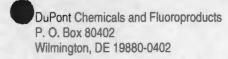
Jacqueline McFarlane

Product Manager (34)

Regulatory Management Branch II Antimicrobials Division (7510P)

TASK ASSIGNMENT FORM
Antimic ial Division/Regulatory Management Inches I/II

A			(	Complete	d by Product Man	ager		
PRODUCT RE	VIEWER: Stac	ey Gr	rigsby			RMB I	TEAM 34	
Description of	Action: Notific	cation	n			EPA Fil	e Symbol/Reg No	o.: 71654-6
FQPA Action (	Code: <u>332</u>		Non-FQPA	Action Cod	le:	Fee for Service A	ction Code:	
Decision No.	432 958		Submission N	vo. 873	890	Fee for Service Fe	ee: \$	
			MON	TH	DAY		YEAR	
APPLICATIO	N DATE		4		12	2010		
EPA PIN DAT	E		4		21		2010	
REVIEWER A	SSIGNED DAT	E	5		3		2010	
DATE DUE TO	) PM						2010	
DATE DUE OU	UT OF AGENC	Y	5		21		2010	
Type of Data:				Efficacy	Environmental Fate	Ecological Effects	Chronic Toxicology	Exposure
АТТАСНМЕ	Update Dire	X	s for Use	NG	CSFs	DA	ATA	OTHER
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**DuPont Chemicals and Fluoroproducts** 

April 13, 2010

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
Jacqueline McFarlane (PM34)
2777 South Crystal Drive
Arlington, VA 22202-4501

SUBJECT: Virkon® S, EPA Registration #: 71654-6
Notification to correct the master label on PPLS Website

Dear Ms. McFarlane,

It has come to our attention that the label posted on the PPLS website for the above referenced product related to the PR 2007-4 notification is incorrect. The posted label is from a submission that received pin-punch May 20, 2008. The May 2008 submission did not contain upgraded container disposal language and has directions for use which have not been accepted to date.

Please consider this letter and its attachments as a notification to correct the master label for the above referenced product. The attached label also incorporates the revision required by your July 1, 2009 Accepted with Comments letter.

Please refer to the attached:

- ➤ Completed application for Pesticide Registration (EPA form 8570-1) dated April 9, 2010
- > Two copies of the master label (one with corrections highlighted) (14 pages ea)
- ➤ One copy of label posted on PPLS Website dated July 1, 2009 (16 pages)
- > One CD with Master e-label, 071654.00006.20100409.MasterVirkonS.Corrected.pdf

Should you have any questions, please feel free to call me at (302)695-2328 or email susan.m.schaner@usa.dupont.com.

Sincerely,

Susan M. Schaner

Regulatory Coordinator

Sween M. Seh

DuPont Chemicals and Fluoroproducts

lease read instructions on reverse befo	ore coming for	rm.	Form Approve	MB No. 2070-	0060, Approval expires 05-31-98	
₽ EDA	United ironmental F	d States Protection Agency n, DC 20460	☐ Regist	ration	OPP Identifier Numbe	
	A	pplication for Pes	sticide - Section	n I		
1. Company/Product Number 71654-6			Product Manager ine McFarlane (ac	eting)	3. Proposed Classification	
4. Company/Product (Name)		PM#		None Restricte		
Virkon S  5. Name and Address of Applicant (I  E.I. du Pont de Nemours and Co  DuPont Chemical Solutions Ente  P.O. Box 80402 (E403-3224D)  Wilmington, DE 19880-0402  Attn: Susan M. Schaner	mpany	6. Expe (b)(l), m to: EPA Re		ar or identical ir	ith FIFRA Section 3(c)(3) n composition and labeling	
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Chock if this is a new a	201033	Sectio	n II			
		Section				
Amendment – Explain below.					Agency letter dated	
Resubmission in response to A	gency letter date	d	Me Too" Applic			
Notification - Explain below.  Explanation: Use additional			Other - Explain		1	
ifra.		P=-41	- 111			
		Sectio	n - III			
Material This Product Will Be Parthelia Child-Resistant Packaging     Yes*     No	Unit Packagi Yes No		Water Soluble Packaging Yes No		2. Type of Container  Metal Plastic Glass Paper Other (Specifiy)	
*Certification must be submitted	If "Yes" Unit Packagi	No. per ng wgt. container	If "Yes" No. per Package wgt. container			
3. Location of Net Contents Information Label Con	tainer 4	I. Size(s) Retail Contain	er	On Label	Label Directions	
Manner in Which Label is Affixed	to Product	Lithograph Paper glued Stenciled	Other		••••	
		Section	n - IV			
1. Contact Point (Complete Items di	rectly below for in	lentification of individual	to be contacted if ner	cessary, to process	this application)	
Name Susan M. Schaner	20,000 10,10	Title Regulatory Co		T T	elephone No. (Include Area Cod (302) 695-2328	
I certify that the statements I have r acknowledge that any knowingly fal- under applicable law.	nade on this form	ertification and all attachments ther	reto are true, accurate		6. Date Application Received •(Stamped)	
2. Signature		3. Title				
Susen M. Schan						
4. Typed Name		Regulatory 5. Date	Coordinator			

## Virkon® S Disinfectant and Virucide

### BROAD SPECTRUM DISINIFECTANT, FUNGICIDE & ALGAECIDE [OPT]

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] [OPT]

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities
For Use in Emergency Disease Control [OPT]

Effective against
•Viruses
Including Canine Parvovirus [OPT]
•Bacteria
•Fungi

A	CTI	VF	IN	GR	FD	<b>IEN</b>	TS.

Potassium peroxymonosulfate	21.41%
Sodium Chloride	1.50%
OTHER INGREDIENTS	77.09%
TOTAL	100.00%

Equivalent to 9.75% Available Chlorine

## DANGER/PELIGRO

See Inside Booklet for Additional Precautions [OPT]
See leaflet for additional directions for use [OPT]

POWDER FORM [OPT]

TABLET FORM [OPT]

SACHET FORM [OPT]

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Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a DuPont Company

EPA Reg. No. 71654-6

EPA Est. No. XXXXX-YY-ZZZ

<Lot or batch #>

#### Front Panel Continued

If in Eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>
If on Skin or Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>
If Swallowed:	<ul> <li>Call a Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person</li> </ul>

#### HOI LINE NUMBER

For 24-hour emergency information on this product, call 1-800-441-3637 (US & Canada) or 1-302-774-1139 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for: E.I. DuPont de Nemours and Company PO Box 80023 Wilmington, DE 19880-0023 Questions? Call 1-800-441-7515 Outside the US, contact: 1-302-774-1000

US Patent No. 4822512

#### EFFECTIVE AGAINST THE FOLLOWING PATHOGENS:

#### ANIMAL AND ZOONOTIC PATHOGENS

#### **BACTERIA**

Actinobacillus pleuropneumoniae

Bacillus cereus

Brucella abortus

Campylobacter jejuni

Clostridium perfringens

Dermatophilus congolensis

Escherichia coli

Klebsiella pneumoniae

Mycoplasma gallisepticum

Pasteurella multocida

Pseudomonas aeruginosa

Salmonella enterica

Salmonella typhimurium

Shigella sonnei

Staphylococcus aureus

Staphylococcus epidermidis

Streptococcus pyogenes

Streptococcus suis

Not approved in California for use against

the following bacteria:

Bordetella avium

Bordetella bronchiseptica

Fistulous withers (Poll Evil)

Haemophilus somnus

Helicobacter pylori

Listeria monocytogenes

Moraxella bovis (Pink Eye)

Mycoplasma hyopneumonia

Mycoplasma mycoides

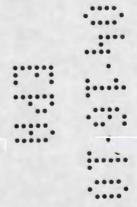
Pseudomonas mallei (Glanders)

Pseudomonas vulgaris

Streptococcus equi (Strangles)

Taylorella equigenitalis

Treponema hyodysenteriae



#### VIRUSES

Avian Influenza Virus

Avian Laryngotracheitis Virus

Bovine Adenovirus Type 4

Canine Adenovirus (Canine Hepatitis)

Canine Parvovirus

Equine Herpes Virus (Type 1)

Equine Herpes Virus (Type 3)

Equine Influenza Virus (Type A)

Feline Calicivirus

Feline Panleukopenia Virus

Feline Rhinotracheitis Virus

Newcastle Disease Virus

Simian virus (SV40 Virus)

Not approved in California for use against

the following viruses:

Adenovirus Pneumonia

African Horse Sickness Virus

African Swine Fever Virus (tested with 1%

soil load and 342 ppm hard water)

Bovine Polyoma Virus

Bovine Pseudocowpox Virus

Bovine Viral Diarrhea Virus (no hard water)

Calf Rotavirus (no hard water)

Canine Coronavirus

Canine Parainfluenza Virus

Chicken Anemia Virus

Coital Exantherma Virus

Distemper Virus

Duck Adenovirus (no hard water)

Duck Enteritis Virus

Egg Drop Syndrome Adenovirus

Equine Infectious Anemia Virus (Swamp

Fever)

Equine Arteritis Virus (no hard water)

Not approved in California cont.

Equine Contagious Abortion Virus

Equine Papillomatosis Virus

Equine Influenza Virus (The Cough)

Feline Herpes Virus

Feline Infectious Peritonitis Virus

Feline Parvovirus

Foot and Mouth Disease Virus

Hog Cholera Virus

Infectious Bronchitis Virus

Infectious Bursal Disease Virus

Infectious Canine Hepatitis Virus

Infectious Pancreatic Necrosis Virus

Infectious Salmon Anaemia Virus

Infective Bovine Rhinotracheitis Virus (no

hard water)

Leptospira Canicola Virus

Maedi- Visna Virus

Marek's Disease Virus

Mouse Parvovirus

PCV2 Virus (PMWS)

Porcine Parvovirus

Porcine Reproductive and Respiratory

Syndrome Virus (PRRS)

Pseudorabies Virus (Aujesky's Disease) (no

hard water)

Rotaviral Diarrhea Virus

Snakehead rhabdovirus

Swine Influenza Virus

Swine Vesicular Disease Virus

Transmissible Gastroenteritis Virus (TGE)

(no hard water)

Turkey Herpes Virus (no hard water)

Turkey Rhinotracheitis Virus

Vesicular Stomatitis Virus

## **FUNGI**

Trichophyton mentagrophytes (2%)

Not approved in California for use against the following fungi:
Aspergillus fumigatus
Fusarium moniliforme
Microsporum canis
Trichophyton spp. (Ringworm)
Trichophyton spp. (Mud Fever)

## **PLANT PATHOGENS**

Not approved in California for use against plant pathogens:

Alternaria solani
Botrytis cinera
Colletotrichum coccodes
Didymella bryoniae
Fusarium oxysporum
Fusarium solani
Penicillium oxalicum
Phomopsis sclerotioides

Pyrenochaeta lycoopersici Pythium aphanidermatium Rhizoctonia solani Sclerotinia sclerotiorum Thielaviopsis basicola Verticillium dahliae Xanthomonas axonopodis



## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER.** Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use-diluted solution.

#### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### **BROAD SPECTRUM DISINFECTANT**

Virkon<sup>®</sup> S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts – *Not Approved for this use in California*), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."

Respiratory illnesses attributable to Pandemic 2009 H1N1 are caused by influenza A virus. Virkon® S [OPT] [Product Name] is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu). [OPT]

This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus [OPT] •

This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1NL. (formerly called swine flu). [OPT]

Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu). [OPT]

Kills Pandemic 2009 H1N1 influenza A virus. [OPT]

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.



#### Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water. OPT]

#### Powder

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces
1 Gallon	0.65 ounces*	1.3 ounces	2.7 ounces
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces
50 Gallons	33.4 ounces*	66.8 ounces	. 133.5 ounces

Measuring cup provided.

#### Tablet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Pint		1 tablet	2 tablets
1 Quart	1 tablet*	2 tablets	4 tablets
1 Gallon	4 tablets*	8 tablets	16 tablets

#### Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]



#### POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella enterica, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. *Not approved in California for use against the following organisms:* Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts – *Not Approved for this use in California*) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.

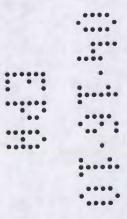
HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes.

Virkon® S at 1-2% solution is recommended for use in fogging (wet misting) operations as a supplemental measure, either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with water. Do not house poultry or use equipment until treatment has dried.

FOR AIR SANITIZING: Not approved for this use in California: Use Virkon® S at 0.5-1% solution and fog until surfaces are moist. Allow at least 2 hours before entering treated area. Rinse foggers and sprayers with water following use.

PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors.



#### **SWINE PRODUCTION**

CONTROLS: Bacteria of Actinobacillus Pleuropneumoniae and Clostridium perfringens. *Not approved in California for use against the following organisms:* Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme, Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.

Follow General Instructions to remove swine and preclean area to be treated. Virkon® S at 1% solution is recommended for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. *Not approved in California for fogging at dilutions less than 1%*. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

### **EQUINE PRODUCTION**

BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING AND DISINFECTING STABLES, EQUIPMENT AND AERIAL DISINFECTION

CONTROLS: Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme, Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).

APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1% Virkon® S solution. Rinse with clean water.

Blankets, Saddle Pads and Rugs: Not an approved use in California: Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue. Aerial Spraying to control airborne diseases: Not an approved use in California: Use a hand or knapsack sprayer with fine setting, or an automatic spraying system. Spray a 1% Virkon® S solution for 2-3 minutes twice daily, first thing in the morning and last thing at night. Rinse sprayers with water after use.

#### **BOVINE PRODUCTION**

CONTROLS: Bovine Adenovirus Type 4. *Not approved in California for use against the following organisms:* Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.

Follow General Instructions to remove livestock and preclean area to be treated. A 1% solution of Virkon<sup>®</sup> S is recommended to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments.

#### **COMPANION ANIMALS**

CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. *Not approved in California for use against the following organisms:* Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.

APPLICATIONS: A 1% solution of Virkon® S is recommended as a "one step" cleaning and disinfecting procedure (Remove Gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems]within [associated with]Veterinary Medical Hospitals, infectious disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

## GREENHOUSES AND HORTICULTURE

Virkon® S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other.... horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. Not approved in California for use on ventilation and other equipment and water systems. It is not intended to directly affect agricultural production and must not be applied to plants, seeds, or soil. If necessary, remove or cover these items prior to use of the product.

For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution on surfaces that have not been pre-cleaned with water to removed organic deposits.

- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak tools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.

For evaporative coolers: *Not approved use in California*: Treat existing algae and slime-contaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.

Virkon® S may also be used to disinfect irrigation tanks and lines. *Not approved use in California*: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

## AQUACULTURE

Not approved for this use in California

Virkon® S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon® S may also be used in foot dips. Virkon® S must not be applied directly to water....

Equipment used in separate sites, tanks, ponds in aquacultural settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon® S solution followed by a water rinse.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations of as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

## EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)

Not approved for this use in California

CONTROLS: OIE List A Disease organisms including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newcastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia). (OPT.)

A 1% solution of Virkon® S is recommended to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins and containers).

Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

## DISINFECTION LIMITED TO SPECIFIC AND KNOWN DISEASE ORGANISMS Not approved for this use in California

The instructions above call for use of a 1% solution for general disinfection, however, Virkon® S is effective against the following disease organisms at the dilution rates specified below. If the threat is known and limited to one of the organisms below, Virkon® S may be used at the following dilution rates:

Disease Organism	Dilution	Oz./	Gal.
	Rate		•••••
PCV2 Virus (PMWS)	1:200	0.7	
	•	***	
	••	****	
	••		****
			••••••
			•

### USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS

A 1% solution of Virkon® S is recommended to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Virkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does <u>not</u> come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges or other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or allowing people to contact treated sites.

#### STORAGE AND DISPOSAL

#### PESTICIDE STORAGE:

<u>For pails, [jugs], [bottles]</u>: Store in a cool dry place in tightly closed container. Keep out of reach of children. Always replace lid after use. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

For [sachet] [pouch] [packet] [bag]: Store in a cool dry place. Keep out of reach of children. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

[For spray bottle with in-use solution: Store in a cool dry place. Keep out of reach of children. Do not mix this product with other chemicals.]

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. [Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.] Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.



## USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS

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#### STORAGE AND DISPOSAL

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For pails, [jugs], [bottles]: Store in a cool dry place in tightly closed container. Keep out of reach of children. Always replace lid after use. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

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CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. [Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.] Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then ofter for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

DEC 2 2009

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Thomas C. McEntee
Product Registration Manager
E.I.du Pont de Nemours and Company
DuPont Chemical Solutions Enterprise
Experimental Station (ESL402/3224A)
P.O. Box 80402
Wilmington, DE 19880-0402

FILE COPY

Subject:

Notification Application per PR Notice 95-2

Virkon® S

EPA Registration Number: 71654-6 Application Date: November 11, 2009 Receipt Date: November 12, 2009

Dear Mr. McEntee:

This will acknowledge receipt of your notification, submitted under the provisions of PR Notice 95-2.

## **Proposed Notification:**

Addition of Influenza A virus (H1N1) label claim

## **General Comment:**

Based on a review of the material submitted, the following comment applies:

The notification is acceptable.

Should you have any questions concerning this letter, please contact Heather Garvie at (703) 308-0034 or by email address at <a href="mailto:garvie.heather@epa.gov">garvie.heather@epa.gov</a>.

Sincerely,

ShaRon Carlisle

(Acting) Product Manager 34

Regulatory Management Branch II Antimicrobials Division (7510P)

## Virkon® S Disinfectant and Virucide

## BROAD SPECTRUM DISINIFECTANT, FUNGICIDE & ALGAECIDE [OPT]

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] {OPT}

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities
For Use in Emergency Disease Control [OPT]

Effective against
•Viruses
Including Canine Parvovirus [OPT]
•Bacteria

•Fungi



**ACTIVE INGREDIENTS:** 

Potassium peroxymonosulfate	21.41%
Sodium Chloride	1.50%
OTHER INGREDIENTS	77.09%
TOTAL	100.00%

Equivalent to 9.75% Available Chlorine

# DANGER/PELIGRO

See Inside Booklet for Additional Precautions

POWDER FORM [OPT]

TABLET FORM [OPT]

SACHET FORM [OPT]

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Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a DuPont Company

EPA Reg. No. 71654-6

EPA Est. No. XXXXX-YY-ZZZ

Page 1 of 13

#### Front Panel Continued

FIRST AID			
If in Eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present after 5 minutes, then continue rinsing eye.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>		
If on Skin or Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>		
If Swallowed:	<ul> <li>Call Poison Control Center or doctor immediately for treatment advice.</li> <li>Have Person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person</li> </ul>		

For 24-hour emergency information on this product, call 1-800-3637 (US & Canada) or 1-302-774-1100 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for: E.I. DuPont de Nemours and Company PO Box 80023 Wilmington, DE 19880-0023 Questions? Call 1 800 441-7515

US Patent No. 4822512



## **EFFECTIVE AGAINST THE FOLLOWING PATHOGENS:**

#### ANIMAL AND ZOONOTIC PATHOGENS

#### **BACTERIA**

Actinobacillus pleuropneumoniae

Bacillus cereus

Brucella abortus

Campylobacter jejuni

Clostridium perfringens

Dermatophilus congolensis

Escherichia coli

Klebsiella pneumoniae

Mycoplasma gallisepticum

Pasteurella multocida

Pseudomonas aeruginosa

Salmonella choleraesuis

Salmonella typhimurium

Shigella sonnei

Staphylococcus aureus

Staphylococcus epidermidis

Streptococcus pyogenes

Streptococcus suis

Not approved in California for use against

the following bacteria:

Bordetella avium

Bordetella bronchiseptica

Fistulous withers (Poll Evil)

Haemophilus somnus

Helicobacter pylori

Listeria monocytogenes

Moraxella bovis (Pink Eye)

Mycoplasma hyopneumonia

Mycoplasma mycoides

Pseudomonas mallei (Glanders)

Pseudomonas vulgaris

Streptococcus equi (Strangles)

Taylorella equigenitalis

Treponema hyodysenteriae



#### VIRUSES

Avian Influenza Virus
Avian Laryngotracheitis Virus
Bovine Adenovirus Type 4
Canine Adenovirus (Canine Hepatitis)
Canine Parvovirus
Equine Herpes Virus (Type 1)
Herpes Virus Equine (Type 3)
Equine Influenza Virus (Type A)
Feline Calicivirus
Feline Panleukopenia Virus
Feline Rhinotracheitis Virus
Newcastle Disease Virus
Simian virus (SV40 Virus)

Not approved in California for use against the following viruses: Adenovirus Pneumonia African Horse Sickness Virus African Swine Fever Virus (tested with 1% soil load and 342 ppm hard water) Bovine Polyoma Virus Bovine Pseudocowpox Virus Bovine Viral Diarrhea Virus (no hard water) Calf Rotavirus (no hard water) Canine Coronavirus Canine Parainfluenza Virus Chicken Anemia Virus Coital Exantherma Virus Distemper Virus Duck Adenovirus (no hard water) **Duck Enteritis Virus** Egg Drop Syndrome Adenovirus Equine Infectious Anemia Virus (Swamp Fever) Equine Arteritis Virus (no hard water)

## Not approved in California cont.

Hog Cholera Virus Equine Contagious Abortion Virus Equine Papillomatosis Virus Equine Influenza Virus (The Cough) Feline Herpes Virus Feline Infectious Peritonitis Virus Feline Parvovirus Foot and Mouth Disease Virus Infectious Bronchitis Virus Infectious Bursal Disease Virus Infectious Canine Hepatitis Virus Infectious Pancreatic Necrosis Virus Infectious Salmon Anaemia Virus Infective Bovine Rhinotracheitis Virus (no hard water) Leptospira Canicola Virus Maedi- Visna Virus Marek's Disease Virus Mouse Parvovirus PCV2 Virus (PMWS) Porcine Parvovirus Porcine Reproductive and Respiratory Syndrome Virus (PRRS) Pseudorabies Virus (Aujesky's Disease) (no hard water) Rotaviral Diarrhea Virus Snakehead rhabdovirus Swine Influenza Virus Swine Vesicular Disease Virus Transmissible Gastroenteritis Virus (TGE) (no hard water) Turkey Herpes Virus (no hard water) Turkey Rhinotracheitis Virus

Vesicular Stomatitis Virus



#### **FUNGI**

Trichophyton mentagropphytes (2%)

Not approved in California for use against the following fungi:
Aspergillus fumigatus
Fusarium moniliforme
Microsporum canis
Trichophyton spp. (Ringworm)
Trichophyton spp. (Mud Fever)

## PLANT PATHOGENS

Not approved in California for use against plant pathogens:

Alemaria solani
Botrytis cinera
Colletotrichum coccodes
Didymella bryoniae
Fusarium oxysporum
Fusarium solani
Penicillium oxalicum
Phomopsis sclerotioides

Pyrenochaeta lycoopersici Pythium aphanidermatium Rhizoctonia solani Sclerotinia sclerotiorum Thielaviopsis basicola Verticillium dahliae Xanthomonas axonopodis



## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use solution.

#### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

## **BROAD SPECTRUM DISINFECTANT**

Virkon® S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."

Respiratory illnesses attributable to Pandemic 2009 H1N1are caused by influenza A virus. Virkon® S [OPT] [Product Name] is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).[OPT]

This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus. [OPT]

This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).[OPT]

Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu). [OPT]

Kills Pandemic 2009 H1N1 influenza A virus. [OPT]

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

#### Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water. OPT]

#### Powder

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces
1 Gallon	0.65 ounces*	1.3 ounces	2.7 ounces
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces
50 Gallons	33.4 ounces*	66.8 ounces	133.5 ounces

Measuring cup provided.

Mer				****
Quantity of Water	0.5% Solution*	1% Solution	2% Solution	
1 Pint		1 tablet	2 tablets	
1 Quart	1 tablet*	2 tablets	4 tablets	*****
1 Gallon	4 tablets*	8 tablets	16 tablets	••••

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.

Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution is currently not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]

#### POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella chloeraesuis, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. *Not approved in California for use against the following organisms:* Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.

HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes.

Virkon® S at 1-2% solution is recommended for use in fogging (wet misting) operations as a supplemental measure, either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with water. Do not house poultry or use equipment until treatment has dried.

FOR AIR SANITIZING: Not approved for this use in California: Use Virkon® S at 0.5-1% solution, and fog until surfaces are moist. Allow at least 2 hours before entering treated area. Rinse foggers and sprayers with water following use.

PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors.

#### **SWINE PRODUCTION**

CONTROLS: Bacteria of Actinobacillus Pleuropneumoniae and Clostridium perfringens;. Not approved in California for use against the following organisms: Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.

Follow General Instructions to remove swine and preclean area to be treated. Virkon® S at 1% solution is recommended for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. *Not approved in California for fogging at dilutions less than 1%*. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

## **EQUINE PRODUCTION**

BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING AND DISINFECTING STABLES, EQUIPMENT, AND AERIAL DISINFECTION

CONTROLS: Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme. Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).

APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1% Virkon® S solution. Rinse with clean water.

Blankets, Saddle Pads and Rugs: Not an approved use in California: Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue.

Aerial Spraying to control airborne diseases: Not an approved use in California: Use a hand or knapsack sprayer with fine setting, or an automatic spraying system. Spray a 1% Virkon® 9 solution for 2-3 minutes twice daily, first thing in the morning and last thing at night. Rinse sprayers with water after use.

Page 9 of 13

#### BOVINE PRODUCTION

CONTROLS: Bovine Adenovirus Type 4; Not approved in California for use against the following organisms: Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.

Follow General Instructions to remove livestock and preclean area to be treated. A 1% solution of Virkon<sup>®</sup> S is recommended to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments.

#### COMPANION ANIMALS

CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. *Not approved in California for use against the following organisms:* Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.

APPLICATIONS: A 1% solution of Virkon® S is recommended as a "one step" cleaning and disinfecting procedure (Remove Gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems] within [associated with] Veterinary Medical Hospitals, infections disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

#### GREENHOUSES AND HORTICULTURE

Virkon® S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. Not approved in California for use on ventilation and other equipment and water systems. It is not intended to directly affect agricultural production and must not be applied to plants, seeds, or soil. If necessary, remove or cover these items prior to use of the product.

For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution of surfaces that have not been pre-cleaned with water to removed organic deposits.

- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

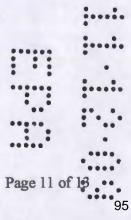
Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak tools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.

For evaporative coolers *Not approved use in California*:: treat existing algae and slime-contaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.

Virkon® S may also be used to disinfect irrigation tanks and lines. *Not approved use in California*: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.



#### **AOUACULTURE**

Not approved for this use in California

Virkon® S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon® S may also be used in foot dips. Virkon® S must not be applied directly to water.

Equipment used in separate sites, tanks, ponds in aquacultural settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon® S solution followed by a water rinse.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

## **EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)**

Not approved for this use in California

CONTROLS: OIE List A Disease organisms including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newcastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia). (OPT.)

A 1% solution of Virkon® S is recommended to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins, and containers).

Spray Virkon<sup>60</sup> S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.



#### DISINFECTION LIMITED TO SPECIFIC AND KNOWN DISEASE ORGANISMS

Not approved for this use in California

The instructions above call for use of a 1% solution for general disinfection, however, Virkon® S is effective against the following disease organisms at the dilution rates specified below. If the threat is known and limited to one of the organisms below, Virkon® S may be used at the following dilution rates:

Disease Organism	Dilution rate	Oz./Gal.
PCV2 Virus (PMWS)	1:200	0.7

#### USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS

A 1% solution of Virkon® S is recommended to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Virkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does <u>not</u> come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges on other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or allowing people to contact treated sites.

#### STORAGE AND DISPOSAL

PESTICIDE STORAGE Store out of reach of children.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Page 13 of 13.

## Virkon® S Disinfectant and Virucide

## BROAD SPECTRUM DISINIFECTANT, FUNGICIDE & ALGAECIDE [OPT]

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] [OPT]

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities
For Use in Emergency Disease Control [OPT]

Effective against
•Viruses
Including Canine Parvovirus [OPT]
•Bacteria
•Fungi

ACTIVE INGREDIENTS:	
Potassium peroxymonosulfate	21.41%
Sodium Chloride	1.50%
OTHER INGREDIENTS	<u>77.09%</u>
TOTAL	100.00%

NOTIFICATION
Date Reviewed: 5/13/0
Reviewed By: 5/13/0

Equivalent to 9.75% Available Chlorine

## DANGER/PELIGRO

See Inside Booklet for Additional Precautions [OPT]
See leaflet for additional directions for use [OPT]

POWDER FORM [OPT]

TABLET FORM [OPT]

SACHET FORM [OPT]

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Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a DuPon Company

EPA Reg. No. 71654-6

EPA Est. No. XXXXXX-YY-ZZZ

<Lot or batch #>

## Front Panel Continued

FIRST AID			
If in Eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>		
If on Skin or Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control Center or doctor for further treatmen advice.</li> </ul>		
If Swallowed:	<ul> <li>Call a Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person</li> </ul>		

## HOT LINE NUMBER

For 24-hour emergency information on this product, call 1-800-441-3637 (US & Canada) or 1-302-774-1139 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for: E.I. DuPont de Nemours and

E.I. DuPont de Nemours and Company

PO Box 80023

Wilmington, DE 19880-0023

Questions? Call 1-800-441-7515

Outside the US, contact: 1-302-774-1000

US Patent No. 4822512



### **EFFECTIVE AGAINST THE FOLLOWING PATHOGENS:**

#### ANIMAL AND ZOONOTIC PATHOGENS

#### **BACTERIA**

Actinobacillus pleuropneumoniae

Bacillus cereus

Brucella abortus

Campylobacter jejuni

Clostridium perfringens

Dermatophilus congolensis

Escherichia coli

Klebsiella pneumoniae

Mycoplasma gallisepticum

Pasteurella multocida

Pseudomonas aeruginosa

Salmonella enterica

Salmonella typhimurium

Shigella sonnei

Staphylococcus aureus

Staphylococcus epidermidis

Streptococcus pyogenes

Streptococcus suis

Not approved in California for use against

the following bacteria:

Bordetella avium

Bordetella bronchiseptica

Fistulous withers (Poll Evil)

Haemophilus somnus

Helicobacter pylori

Listeria monocytogenes

Moraxella bovis (Pink Eye)

Mycoplasma hyopneumonia

Mycoplasma mycoides

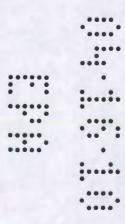
Pseudomonas mallei (Glanders)

Pseudomonas vulgaris

Streptococcus equi (Strangles)

Taylorella equigenitalis

Treponema hyodysenteriae



#### **VIRUSES**

Avian Influenza Virus

Avian Laryngotracheitis Virus

Bovine Adenovirus Type 4

Canine Adenovirus (Canine Hepatitis)

Canine Parvovirus

Equine Herpes Virus (Type 1)

Equine Herpes Virus (Type 3)

Equine Influenza Virus (Type A)

Feline Calicivirus

Feline Panleukopenia Virus

Feline Rhinotracheitis Virus

Newcastle Disease Virus

Simian virus (SV40 Virus)

Not approved in California for use against

the following viruses:

Adenovirus Pneumonia

African Horse Sickness Virus

African Swine Fever Virus (tested with 1%

soil load and 342 ppm hard water)

Bovine Polyoma Virus

Bovine Pseudocowpox Virus

Bovine Viral Diarrhea Virus (no hard water)

Calf Rotavirus (no hard water)

Canine Coronavirus

Canine Parainfluenza Virus

Chicken Anemia Virus

Coital Exantherma Virus

Distemper Virus

Duck Adenovirus (no hard water)

**Duck Enteritis Virus** 

Egg Drop Syndrome Adenovirus

Equine Infectious Anemia Virus (Swamp

Fever)

Equine Arteritis Virus (no hard water)

Not approved in California cont.

**Equine Contagious Abortion Virus** 

Equine Papillomatosis Virus

Equine Influenza Virus (The Cough)

Feline Herpes Virus

Feline Infectious Peritonitis Virus

Feline Parvovirus

Foot and Mouth Disease Virus

Hog Cholera Virus

Infectious Bronchitis Virus

Infectious Bursal Disease Virus

Infectious Canine Hepatitis Virus

Infectious Pancreatic Necrosis Virus

Infectious Salmon Anaemia Virus

Infective Bovine Rhinotracheitis Virus (no

hard water)

Leptospira Canicola Virus

Maedi- Visna Virus

Marek's Disease Virus

Mouse Parvovirus

PCV2 Virus (PMWS)

Porcine Parvovirus

Porcine Reproductive and Respiratory

Syndrome Virus (PRRS)

Pseudorabies Virus (Aujesky's Disease) (no

hard water)

Rotaviral Diarrhea Virus

Snakehead rhabdovirus

Swine Influenza Virus

Swine Vesicular Disease Virus

Transmissible Gastroenteritis Virus (TGE)

(no hard water)

Turkey Herpes Virus (no hard water).

Turkey Rhinotracheitis Virus

Vesicular Stomatitis Virus

#### **FUNGI**

Trichophyton mentagrophytes (2%)

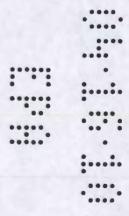
Not approved in California for use against the following fungi:
Aspergillus fumigatus
Fusarium moniliforme
Microsporum canis
Trichophyton spp. (Ringworm)
Trichophyton spp. (Mud Fever)

## **PLANT PATHOGENS**

Not approved in California for use against plant pathogens:

Alternaria solani
Botrytis cinera
Colletotrichum coccodes
Didymella bryoniae
Fusarium oxysporum
Fusarium solani
Penicillium oxalicum
Phomopsis sclerotioides

Pyrenochaeta lycoopersici Pythium aphanidermatium Rhizoctonia solani Sclerotinia sclerotiorum Thielaviopsis basicola Verticillium dahliae Xanthomonas axonopodis



## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER.** Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use-diluted solution.

#### ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### **BROAD SPECTRUM DISINFECTANT**

Virkon<sup>®</sup> S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts – *Not Approved for this use in California*), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."

Respiratory illnesses attributable to Pandemic 2009 H1N1 are caused by influenza A virus. Virkon® S [OPT] [Product Name] is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu). [OPT]

This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus. [OPT]

Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu). [OPT] •

Kills Pandemic 2009 H1N1 influenza A virus. [OPT]

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.



## Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water. OPT]

#### Powder

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces
1 Gallon	0.65 ounces*	1.3 ounces	2.7 ounces
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces
50 Gallons	33.4 ounces*	66.8 ounces	133.5 ounces

Measuring cup provided.

#### Tablet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Pint		1 tablet	2 tablets
1 Quart	1 tablet*	2 tablets	4 tablets
1 Gallon	4 tablets*	8 tablets	16 tablets

## Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]



#### POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella enterica, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. *Not approved in California for use against the following organisms:* Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts – *Not Approved for this use in California*) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.

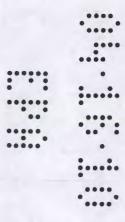
HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes.

Virkon® S at 1-2% solution is recommended for use in fogging (wet misting) operations as a supplemental measure, either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with water. Do not house poultry or use equipment until treatment has dried.

FOR AIR SANITIZING: Not approved for this use in California: Use Virkon® S at 0.5-1% solution and fog until surfaces are moist. Allow at least 2 hours before entering treated area. Rinse foggers and sprayers with water following use.

PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors.



## **SWINE PRODUCTION**

CONTROLS: Bacteria of Actinobacillus Pleuropneumoniae and Clostridium perfringens. Not approved in California for use against the following organisms: Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme, Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.

Follow General Instructions to remove swine and preclean area to be treated. Virkon® S at 1% solution is recommended for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. *Not approved in California for fogging at dilutions less than 1%*. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

### **EQUINE PRODUCTION**

BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING AND DISINFECTING STABLES, EQUIPMENT AND AERIAL DISINFECTION

CONTROLS: Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme, Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).

APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1%. Virkon® S solution. Rinse with clean water.

Blankets, Saddle Pads and Rugs: Not an approved use in California: Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue.

Aerial Spraying to control airborne diseases: Not an approved use in California: Use a hand or knapsack sprayer with fine setting, or an automatic spraying system. Spray a 1% Virkon® S solution for 2-3 minutes twice daily, first thing in the morning and last thing at night. Rinse sprayers with water after use.

#### **BOVINE PRODUCTION**

CONTROLS: Bovine Adenovirus Type 4. Not approved in California for use against the following organisms: Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.

Follow General Instructions to remove livestock and preclean area to be treated. A 1% solution of Virkon® S is recommended to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments.

#### COMPANION ANIMALS

CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. *Not approved in California for use against the following organisms:* Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.

APPLICATIONS: A 1% solution of Virkon® S is recommended as a "one step" cleaning and disinfecting procedure (Remove Gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems] within [associated with] Veterinary Medical Hospitals, infectious disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

#### GREENHOUSES AND HORTICULTURE

Virkon® S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. Not approved in California for use on ventilation and other equipment and water systems. It is not intended to directly affect agricultural production and must not be applied to plants, seeds, of soil. If necessary, remove or cover these items prior to use of the product.

For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution on surfaces that have not been pre-cleaned with water to removed organic deposits.

- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak tools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.

For evaporative coolers: *Not approved use in California*: Treat existing algae and slime-contaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.

Virkon® S may also be used to disinfect irrigation tanks and lines. *Not approved use in California*: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

#### **AQUACULTURE**

Not approved for this use in California

Virkon® S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon® S may also be used in foot dips. Virkon® S must not be applied directly to water.

Equipment used in separate sites, tanks, ponds in aquacultural settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon® S solution followed by a water rinse.

Virkon<sup>®</sup> S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

109

#### EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)

Not approved for this use in California

CONTROLS: OIE List A Disease organisms including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newcastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia). (OPT.)

A 1% solution of Virkon® S is recommended to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins and containers).

Spray Virkon<sup>®</sup> S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

### DISINFECTION LIMITED TO SPECIFIC AND KNOWN DISEASE ORGANISMS Not approved for this use in California

The instructions above call for use of a 1% solution for general disinfection, however, Virkon® S is effective against the following disease organisms at the dilution rates specified below. If the threat is known and limited to one of the organisms below, Virkon® S may be used at the following dilution rates:

Disease Organism	Dilution Rate	Oz./Gal.
PCV2 Virus (PMWS)	1:200	0.7

#### USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS

A 1% solution of Virkon® S is recommended to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Virkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does <u>not</u> come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges or other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or allowing people to contact treated sites.

#### STORAGE AND DISPOSAL

#### **PESTICIDE STORAGE:**

For pails, [jugs], [bottles]: Store in a cool dry place in tightly closed container. Keep out of reach of children. Always replace lid after use. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

For [sachet] [pouch] [packet] [bag]: Store in a cool dry place. Keep out of reach of children. [Retain dessicant canister with product during storage.] Do not mix this product with other chemicals.

[For spray bottle with in-use solution: Store in a cool dry place. Keep out of reach of children. Do not mix this product with other chemicals.]

<u>PESTICIDE DISPOSAL</u>: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. [Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.] Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### Material to be added to an e-Jacket/Jacket

Reg. No. 71654-6 □ Placement within the e-Jacket/jacket: □ Default: (chronological, top/newest) ☐ Description: (PDF page number, i.e., "before page 45") 2. Send to Data Extraction contractors this material: Newly stamped accepted label **Notification New CSF** Other: 3. Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900). Reviewer's Name: Yeather Jarrie Division: All Phone:

Date: 12/2/09

Created July 21/2008

## RISK ASSIGNMENT FORM Antimicrobial Division/Regulatory Management Branch I

A	5 I A		Completed I			ager			
PRODUCT	REVIEWER:	HEATHER GA	RVIE			RMB		TEAN	34
Description	of Action: NO	OTIFICATION				EPA I	_	mbol/R 54-6	eg No.
Decision No	. 423482	Submission	No. 862	2768	Fee	for Service Ac	tion C	ode:	
FQPA Actio	n Code: 332	Non-FQPA	Action Co	de:		PRIA FEE AMO	UNT:	\$	
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APPLICATION DATE 11			11		•	200	9		
EPA PIN DA	TE	11		12			200	9	
DATE PM RE	CEIVED FROM	11		17			200	9	
Date sent to	Reviewer	11		18		2009			
DATE SENT	TO SCIENCE						200	9	
DATE RECE	EIVED FROM								
NEGOTIATE	D DUE DATE				_	DATE DUE OUT AGENCY		12-12-0	9
Type of Data:	PSB Product Chemistry	PSB Acute Toxicology	PSB Efficacy	RASSB Environment Fate	ntai	RASSB Ecological Effects	RASS Chro Toxic		RASSB Exposure/ Residue
COMMENTS	S: ADDING	INFLUENZA A	H1N1 CLAI	M					
ATTACHME	NTS: X□-LA	BELING	□-CSF(S	S) □-D.	ATA	□-0	THER	S	
DATE FEE F	PAID:		RESPO	NSE CODE:	113	55 RESPO	NSE D	ATE:/2	132/09



Re: 71654-6 - Notification to add H1N1
Thomas C McEntee to: Heather Garvie

12/01/2009 11:51 AM

unacceptable

46166018 Parsons, G. (1985) Laboratory Evaluation of ANTEC "Virkon S'
Disinf ectant as a Virucidal Agent Against Avian Influenza Virus. Unpubli
shed study prepared by Ministry of Agriculture, Fisheries and Food. 7 p.
Trade Secret Status: Document Contains CBI Submitter: ANTEC INTERNATIONAL
LTD Submitter No. Submission Date Accession No. 062432 01/07/04 461660 18
Administrative No: 062432-1 Laboratory No.: 062432 ANTEC INTERNATIONAL LTD
080063 MINISTRY OF AGRICULTURE, FISHERIES AND FOOD \*\*\* Chemistry Indexing
\*\*\* SUBSTANCE CLASS: Single FORMULATION: Not Formulated Pesticide Sodium
chloride (13905) SUBSTANCE CLASS: Single FORMULATION: Not Formulated
Pesticide Potassium peroxymonosulfate (63604) \*\*\* Subject Indexing \*\*\* ROOT
DT: 1005 Pesticide Use - Product Performance (Efficacy) CONTENT CATEGORY:
Complete Primary Report -- Experimental Research DT SITE: UNSPECIFIED SITES
(DISINFECTANTS ONLY) \*\*\* Key Author Information \*\*\* DOCUMENT TYPE:
Unpublished Monograph AUTHOR: PARSONS/G TITLE: Laboratory Evaluatio DATE:
11/26/85 NO related Documents for MRID: 46166018

EPA Reg No. 62432-1 was transferred to 71654-6 on Nov. 1, 2004

acceptable
46498608 Miller, M. (2005) H-26819 and H-26820: Virucidal Efficacy of a Disi nfectant for Use on Inanimate Environmental Surfaces (Influenza A V irus): Final Study Report. Project Number: A02681, DCSE/2005/009, DUP01122804/FLUA. Unpublished study prepared by ATS Labs. 15 p. Trade Secret Status: Document Contains CBI Submitter: E.I. DUPONT DE NEMOURS AND COMPANY Submitter No. Submission Date Accession No. 071654 03/16/05 464986 08 Administrative No: 071654-7 Laboratory No.: 071654 E.I. DUPONT DE NEMOURS AND COMPANY 080995 ATS LABS Lab Project No.: A02681 DCSE/2005/009 DUP01122804/FLUA \*\*\* Chemistry Indexing \*\*\* SUBSTANCE CLASS: Single FORMULATION: Not Formulated Pesticide Potassium peroxymonosulfate (63604) SUBSTANCE CLASS: Single FORMULATION: Not Formulated Pesticide Sodium chloride (13905) \*\*\* Subject Indexing \*\*\* ROOT DT: 1005 Pesticide Use -Product Performance (Efficacy) GUIDELINE: 91-2 CONTENT CATEGORY: Complete Primary Report -- Experimental Research DT SITE: UNSPECIFIED SITES (DISINFECTANTS ONLY) ROOT DT: 1005 Pesticide Use - Product Performance (Efficacy) GUIDELINE: 91-2 CONTENT CATEGORY: Complete Primary Report --Experimental Research DT SITE: HARD NON-POROUS SURFACE TREATMENTS \*\*\* Key Author Information \*\*\* DOCUMENT TYPE: Unpublished Monograph AUTHOR: MILLER/M TITLE: H-26819 and H-26820: DATE: 03/07/05 NO related Documents for MRID: 46498608

EPA Reg No. 71654-7 has the same formulations (basic and alternates) as 71654-6.

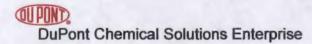
Tom McEntee 978 312 1160 NEW PHONE 978 335 8055 CELL EAH 71654-7 an"500 list" for approved EPA regts for HINI

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of a contract offer. This e-mail does not constitute a consent to the use of sender's contact information for direct marketing purposes or for transfers of data to third parties.

Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/email\_disclaimer.html



November 11, 2009

Document Processing Desk
Antimicrobials Division (7510P)
US Environmental Protection Agency
Office of Pesticide Programs; Room S-4900
Ms. Sharon Carlisle (PM34)
2777 South Crystal Drive
Arlington, VA 22202-4501

Subject: Virkon® S; EPA Registration No. 71654-6

Notification per Pandemic 2009 H1N1 Influenza Policy

Dear Ms. Carlisle,

Please consider this letter and its attachments as a notification to revise the subject registration to include a claim for efficacy against Swine Influenza A (H1N1) Virus.

Should you have any questions, feel free to call or e-mail.

Sincerely,

Thomas C. McEntee

**Product Registration Manager** 

Thomas.C.McEntee@usa.dupont.com

Thomas (. m. Etu

(302) 695-6856

116

#### TRANSMITTAL DOCUMENT

#### Attention:

Antimicrobials Division (7510P)
US Environmental Protection Agency
Office of Pesticide Programs
2777 South Crystal Drive
Arlington, VA 22202-4501

#### NAME AND ADDRESS OF SUBMITTER

E.I.du Pont de Nemours and Company DuPont Chemical Solutions Enterprise Experimental Station (ESL402/3224A) P. O. Box 80402 Wilmington, DE 19880-0402

REGULATORY ACTION IN SUPPORT OF WHICH THIS PACKAGE IS SUBMITTED-

Notification to add a claim for Efficacy against Pandemic 2009 Influenza A H1N1 Virus

"Virkon®"; EPA Registration No. 71654-7

Transmittal Date: November 11, 2009

#### Transmittal Material:

Volume 1	Administrative	Materiale
voilline i	Administrative	IVIAICHAIS

-Cover Letter	1 page
-Application for Pesticide Registration (EPA Form 8570-1)	1 page
-Transmittal Document	this page
-Printed Labeling	13 pages
-Highlighted Label Indicating Changes	13 pages
-071654-00006.20091111.Virkon S.Container H1N1.pdf	1 CD







	Registration
	Amendment
(	Other

OPP Identifier Number

<b>\$EPA</b>		endment er					
		Applicati	on for Pesticide - S	ection I			
1. Company/Product Number 71654-6	100		2. EPA Product Sharon Carlisle		-	roposed Classification	
4. Company/Product (Name Virkon(R) S	)		PM# 34	X	None Restricted		
5. Name and Address of Ap E.I. du Pont de Nemours and Dupont Chemical Solutions E Experimental Station (ESL 40 Wilmington, DE 19880-0402	Company nterprise, P. O. Box 8040			FIFRA Section 3(c)(3) emposition and labeling			
			Section - II	16			
Explanation: Use addition Notification - Label claims in act This notification is consistent we confidential statement of formula in the confidential statement of the confidential statemen	ponse to Agency letter below.  nel page(s) if necessar cordance with Pandemic 2 ith the provisions of PR No la for the product. I nude ent with the terms of PR No	ry. (For section 2009 H1N1 Influction 98-10 and retard that it is	Agence "Me To	46, and no other cha	oppad001/h1n1-g anges have been false statements	made to the labeling or the to EPA. I further understnad that	
			Section - III				
1. Material This Product Wi	H Be Peckaged in:						
Child-Resistant Packaging Yes No * Cartification must	Unit Packaging  X Yes  X No  If "Yes"	No. per	Weter Soluble Peckaging Yes No If "Yes" No.		Metal X Plestic Glass Paper		
be submitted	Unit Packaging wgt.	. container	Peckage wgt cont	ainer	Other (	Specify)	
3. Location of Net Contents  X Label	Information Container	1	otail Container	5. Location	of Label Directi	ons	
6. Manner in Which Label is	Affixed to Product	x Litho Pape Stend	graph r glued ciled	Other			
			Section - IV				
1. Contact Point /Complete	items directly below	for identificati	on of individual to be contac	ted, if necessary,	to process this	application.)	
Thomas C. McEntee						e No. (Include Area Code) 95 6856	
	ny knowlinglly false or		ation d all attachments thereto are atement may be punishable			6. Date Application Received (Stamped)	
2. Signature Propus	a relu		3. Title Product Regis	lanagei			
4. Typed Name			5. Date		****	•	
Thomas C. McEnt	ee		November 11, 2009				

## Material to be added to an e-Jacket/Jacket

	Reg. No. 71654-6
1	Placement within the e-Jacket/jacket:
	☐ Default: (chronological, top/newest)
	Description: (PDF page number, i.e., "before page 45")
	2. Send to Data Extraction contractors this material:
	□ Newly stamped accepted label
	□ Notification
	Now CSE
	Other: pleaseall material to file
	3. Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).
	Reviewer's Name: Hacey GRIGSBY
	Phone: <u>305-4440</u> Division: <u>AD</u>
	Date: 10/1/4/19

### RISK ASSIGNMENT FOOT Antimicrobial Division/Regulatory Management Branch II

A	Completed by Product Manager							
PRODUCT	REVIEWER:	Sta	cey Gri	gsby	RMB	RMB II TEAM 34		
Description	on of Action:		Amerda			EPA File Symbol/Reg No. 71654-6		
Decision	No.41782	Submission	1 No. 85	4878 F	ee for Service A	Action Code:		
FQPA Act	lon Code: 362	Non-FQP	A Action Co	de:	PRIA FEE AMO	FEE AMOUNT: \$		
		MONTH		DAY	YEAR			
APPLICATI	ON DATE	1		13		2009		
EPA PIN D	ATE	7		20		2009		
DATE PM R FRONT END	ECEIVED FROM				2009			
Date sen	t to Reviewer					2009		
DATE SENT	T TO SCIENCE				2009			
DATE RECI	EIVED FROM							
NEGOTIATI	ED DUE DATE				DATE DUE OUT	OF Det 18	2,2009	
Type of Data:	PSB Product Chemistry	PSB Acute Toxicology	PSB Efficacy	RASSB Environmenta Fate	RASSB Ecological Effects	RASSB Chronic Toxicology	RASSB Exposure /Residue	
	Please review		No.				S. E.	
ATTACHME	NTS: U-LABE	LING	I-CSF(S)	□-DATA	□-OTHE	RS		
DATE FEE	PAID:		RESPON	SE CODE: 1/5	5 RESPON	SE DATE: OCT	1 6 2009	



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **WASHINGTON, DC 20460**

OCT 1 6 2009

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Thomas McEntee **DuPont Chemical Solutions Enterprise** P.O. Box 80402 Wilmington, DE 19880-0402

Subject:

Virkon® S

EPA Registration No.: 71654-6 Application Date: July 13, 2009 Receipt Date: July 20, 2009

Dear Mr. McEntee:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) 3(c)7a, as amended, is acceptable.

#### **Proposed Amendment:**

Revise Alternate Confidential Statement of Formulas (CSFs)

#### **General Comment:**

The alternate formulations #13, 14, 15, 15.1, 16, 17 and 18, dated 7/13/09 are acceptable. Copies of the accepted CSFs have been inserted in your file for future reference.

Should you have any questions or comments concerning this letter, you may contact me by telephone at (703) 308-6427 or by e-mail at carlisle.sharon@epa.gov or Stacey Grigsby by telephone at (703) 305-6440 or by e-mail at grigsby.stacey@epa.gov during the hours of 8:00am to 4:00pm EST.

ShaRon Carlisle

(Acting) Product Manager (34) Regulatory Management Branch II Antimicrobials Division (7510P)

			CONCURRENC	CES		
SYMBOL						
SURNAME		,				
DATE						
	1000 14 (100)		Print P		OFFICE	AL FILE COPY



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

K

October 01, 2009

(764-14-5), (10058-23-8)

DP BARCODE: D367642

MRID: N/A

SUBJECT: Virkon® S

REG. NO. OR FILE SYMBOL: 71654-6

DOCUMENT TYPE: Product Chemistry Review

Manufacturing-use [] OR End-use Product [X]

INGREDIENTS (PC Codes)

Sodium Chloride (013905) Potassium peroxymonosulfate (063604)

The state of the s

TEST LAB: N/A

Na+ CI

SUBMITTER: E.I. DuPont de Nemours and Company

GUIDELINE: N/A

COMMODITIES: Formulation

REVIEWER: Juan F. Negrón

ORGANIZATION: AD

APPROVER: Karen P. Hicks

APPROVED DATE: 10/01/09

**COMMENTS:** 

CAS Number:



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

October 01, 2009

Product Chemistry Review for EPA Reg # 71654-6 Subject: Juan F. Negrón, Chemist From: Product Science Branch, C/T Team Antimicrobials Division (7510P) Karen P. Hicks, CT Team Leader Thru: Product Science Branch Antimicrobials Division (7510P) ShaRon Carlisle / Tracy Lantz To: PM Team 34 Antimicrobials Division (7510P) APPLICANT: E.I. Dupont de Nemours and Company Action code: 362 Due date: 10/18/09 % by wt. **Product Formulation Active Ingredient** 

#### BACKGROUND:

The registrant, E.I. DuPont de Nemours and Company, is responding to the Agency letter, dated 06/02/09, and submitted alternate formulations as an amendment for review. The integrated enduse product, VIRKON ® S, is used for cleaning and disinfecting industrial, animal and agricultural facilities. The Product Chemistry Reviewer has received the following documents:

- · A transmittal document, dated 06/17/09.
- · Confidential Statement of Formula, dated 01/05/04
- Confidential Statements of Formula (CSFs), dated 01/05/04, 06/17/09, & 07/13/09, for the basic and alternate #s (1, 2a, 3, 4, 5, 6, 6.1, 7, 7.1, 8, 8.1, 9, 9.1, 10, 10.1, 11, 11.1, 12, 12.1, 13, 14, 15, 15.1, 16, 17, 18) formulations.
- A letter, dated 06/17/09

#### FINDINGS:

- 1. The CSFs, dated 01/05/04, 06/17/09, for the basic and alternate #s (1, 2A, 3, 4, 5, 6, 6.1, 7, 7.1, 8, 8.1, 9, 9.1, 10, 10.1, 11, 11.1, 12, and 12.1) formulations are for reference only.
- 2. The CSFs, dated 07/13/09, for alternate #s (13, 14, 15, 15.1, 16, 17, and 18) formulations are revised.
- The CSFs and the label have the same nominal.
- 4. All certified limits meet the EPA standard certified limits.
- 5. See confidential appendix CBI.

#### CONCLUSIONS:

The CSFs, dated 07/13/09, for alternate #s (13, 14, 15, 15.1, 16, 17, and 18) formulations are acceptable. The proposed amendment is acceptable.

## Confidential Appendix CBI

DP # 367642

EPA Reg # 71654-6

Virkon® S

#### FINDINGS:

5.

## Material to be added to an e-Jacket/Jacket

	Reg. No. 716546
	Placement within the e-Jacket/jacket:
	☑ Default: (chronological, top/newest)
	□ Description: (PDF page number, i.e., "before page 45")
2 🗆	Send to Data Extraction contractors this material:
<b>6.</b> U	□ Newly stamped accepted label
	Notification
	New CSF
	Other:
	ach this coversheet to the top of the material or jacket. be well organized and clipped together, NOT STAPLED give the material with this coversheet to staff in the
Then	nation Services Center (Room S-4900).
Then	ewer's Name: LmcKelnc
Then Information	

## RISK ASSIGNMENT FORM Antimicrobial Division/Regulatory Management Branch II

A		C	ompleted i	by Product Mar	nager			
PRODUCT R	EVIEWER:	Lisa McKelv	in			RMB _	II TEA	M34
Description	of Action: Am	nendment – Res	ponse to let	ter dated June 2	2, 2009		le Symbol/I 71654-6	Reg No.
Decision No.	416543	Submission	No. 853	228 Fe	e for Serv	ice Acti	on Code:	
FQPA Action	Code: 362	Non-FQPA	Action Co	de:	PRIA FE	E AMOU	INT: \$	
		MONTH		DAY			YEAR	
APPLICATIO	N DATE	June		17			2009	
EPA PIN DAT	ΓE	June		23			2009	***
DATE PM REG	CEIVED FROM	June	June 25		2009			
Date sent to	Reviewer	July		1		2009		
DATE SENT	TO SCIENCE						2009	
DATE RECEI SCIENCE	VED FROM							
NEGOTIATE	D DUE DATE				DATE DU AGENCY			upt 21, 2009
Type of Data:	PSB Product Chemistry	PSB Acute Toxicology	PSB Efficacy	RASSB Environmental Fate	RASS Ecolo Effect	gical	RASSB Chronic Toxicology	RASSB Exposure/ Residue
COMMENTS Revised CS								
ATTACHMEN	NTS: □-LABI	ELING	Ø-csf(s	) □-DATA		□-ОТІ	HERS	
DATE FEE P	AID:		RESPON	NSE CODE: //	130 F	RESPON	SE DATE:	9/21/09



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

SEP 21 2009

OFFICE OF PREVENTION, PESTICIDE AND TOXIC SUBSTANCES

Thomas C. McEntee
Product Registration Manager
DuPont Chemical Solutions Enterprise
P.O. Box 80402
Wilmington, DE 19880-0402

Subject:

Virkon® S

EPA Registration Number: 71654-6

Letter Dated: June 17, 2009 Receipt Date: June 23, 2009

Dear Mr. McEntee:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is not acceptable for the following reasons.

#### **Proposed Amendment**

Alternate Confidential Statement of Formulas (CSFs) # 1, 2A,3,4,5,6,6.1,7,7.1,8,8.1,9,9.1,10,10.1,11,11.1,12 and 12.1 (see CSFs dated 6/17/09)

#### **CSF Deficiencies**

- 1. The amounts on the CSFs #8 and 8.1 must be corrected to
- 2. The EPA CSF check sheets submitted is not acceptable. You must use EPA's form 8570-4 when submitting changes.

#### **General Comment**

The alternate CSFs ) # 1, 2A,3,4,5,6,6.1,7,7.1,8,8.1,9,9.1,10,10.1,11,11.1,12 and 12.1 dated 6/17/09 are acceptable and have been inserted in your file for future reference.

Should you have any questions concerning this letter, please contact me at (703) 308-6427 or via email at <a href="mailto:carlisle.sharon@epa.gov">carlisle.sharon@epa.gov</a> or Lisa McKelvin at (703) 308-7496 or via email at <a href="mailto:mckelvin.lisa@epa,gov">mckelvin.lisa@epa,gov</a>.

Sincerely,

ShaRon Carlisle

(Acting)Product Manager 34

Regulatory Management Branch II Antimicrobials Division (7510P)



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

August 03, 2009

DP BARCODE: D366864

MRID: N/A

SUBJECT: Virkon® S

REG. NO. OR FILE SYMBOL: 71654-6

DOCUMENT TYPE: Product Chemistry Review

Manufacturing-use [] OR End-use Product [X]

INGREDIENTS (PC Codes)

CAS Number:

Sodium Chloride (013905) Potassium peroxymonosulfate (063604)

764-14-5, 10058-23-8

TEST LAB: N/A

Na+ CI-

SUBMITTER: E.I. DuPont de Nemours and Company

GUIDELINE: N/A

COMMODITIES: Formulation

REVIEWER: Salvador Rodríguez

ORGANIZATION: AD

APPROVER: Karen P. Hicks

APPROVED DATE: 08/03/09



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

August 03, 2009

#### **MEMORANDUM**

Subject:	Product Chemistry Review for EPA Reg # 71654-6	
From:	Salvador Rodríguez, Chemist Product Science Branch, CT Team Antimicrobials Division (7510P)	)
Thru:	Karen P. Hicks, CT Team Leader Product Science Branch Antimicrobials Division (7510P)	
Thru:	Michele E. Wingfield, Chief Product Science Branch Antimicrobials Division (7510P)	
То:	Lisa McKelvin/ Tracy Lantz PM Team 34 Antimicrobials Division (7510P)	
APPLICANT:	E.I. Dupont de Nemours and Company	
Action code:	362	
Due date:	09/21/09	
Product Formulation	% by wt.	
	assium peroxymonosulfate	

#### **BACKGROUND:**

The registrant, E.I. du Pont de Nemours and Company, has submitted Confidential Statements of Formula for the basic formulations # (1, 2A, 3, 4, 5, 6, 6.1, 7, 7.1, 8, 8.1, 9,9.1, 10, 10.1, 11, 11.1, 12, and 12.1) for the non-integrated end-use product, Virkon® S. The registrant is requesting for accelerated review of minor formulation changes. The Product Chemistry Reviewer has received the following documents:

- A transmittal document, dated 06/17/2009.
- Confidential Statement of Formula, dated 01/05/04
- Confidential Statements of Formula (CSFs), dated 06/17/2009, for alternate # (1, 2a, 3, 4, 5, 6, 6.1, 7, 7.1, 8, 8.1, 9, 9.1, 10, 10.1, 11, 11.1, 12, and 12.1) formulations.
- A cover letter, dated 06/17/2009
- A list of the suppliers for substitute inserts, dated 10/30/2007 and 05/04/2009
- · Confidential Statement of Formula in a different format.

#### FINDINGS:

5.

- The CSFs, dated 06/17/2009, for alternate # (1, 2A, 3, 4, 5, 6, 6.1, 7, 7.1, 8, 8.1, 9, 9.1, 10, 10.1, 1. 11, 11.1, 12, and 12.1) formulations are revised.
- The CSF, dated 01/05/2004, is used as reference. 2.
- The CSFs and the label have the same nominal. 3.
- All certified limits meet the EPA standard certified limits. 4.
- The CSFs, #8 and 8.1, show in box #17 a total weight of
- One attachment submitted is in a different format than the EPA's format 8570-4, and it is not 6. acceptable.

#### **CONCLUSIONS:**

The CSFs, dated 06/17/2009, for alternate # (1, 2A, 3, 4, 5, 6, 6.1, 7, 7.1, 8, 8.1, 9, 9.1, 10, 10.1, 11, 11.1, 12, and 12.1) formulations are acceptable. The proposed technical amendment is acceptable.

#### RECOMMEDATION:

- The registrant must modify the total weight in box # 17. See finding # 5
- The registrant must use the EPA's form 8570-4 to submit any data regarding CSFs information. See finding #6.

. The correct amount is

DuPont Chemical Solutions Enterprise P. O. Box 80402 Wilmington, DE 19880-0402



**DuPont Chemical Solutions Enterprise** 

July13, 2009

Document Processing Desk Antimicrobials Division (7510P) US Environmental Protection Agency Office of Pesticide Programs; Room S-4900 Ms. Tracy Lantz (PM34) 2777 South Crystal Drive Arlington, VA 22202-4501

Subject: Virkon® S; EPA Registration No. 71654-6

Notification per PR Notice 98-10 III.D.

Dear Ms. Lantz

Please consider this letter and its attachments as a NOTIFICATION under PR Notice 98-10 III.D.

I am resubmitting the attached formulas to indicate a specific US producer and for one formula the legacy UK producer. The attached formulas were first submitted on August 2, 2007 and accepted according to the attached letter from Adam Heyward on November 8, 2007. I have revised the current submission to reflect the actual producing location.

Following my submission of June 17, 2009, I have re-designated the CSF's submitted today to a follow-on sequence e.g. the Aug. 2, 2007 Alt.# 1 has been re-named Alt #13 (following Alt. #12.1 of the June 17, 2009 series).

None of the formulas have been changed from the Aug. 2, 2007 declaration.

No intent is made to supersede any previously accepted formula.

Should you have any questions, feel free to call or e-mail.

Sincerely,

Thomas C. McEntee

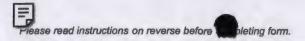
Product Registration Manager

Thomas.C.McEntee@usa.dupont.com

The rows ( in the

(302) 695-6856







	Registration
	Amendmen
Х	Other

OPP Identifier Number

<b>⇔EPA</b>	Environmental Protection Agency Weshington, DC 20460				endment er		
		Applicati	on for Pesticide - S	ection I	-		
1. Company/Product Number 71654-6			2. EPA Product Manager Tracy Lantz		-	oposed Classification	
4. Company/Product (Name) Virkon S (R)			PM# 34			Restricted	
5. Name and Address of Applicant (Include ZiP Code)  E.I. du Pont de Nemours and Company Attn: Thomas C. McEntee Dupont Chemical Solutions Enterprise, P. O. Box 80402 Wilmington, DE 19880-0402  Check if this is a new address			6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No.  Product Name				
			Section - II				
X Notification - Explain  Explanation: Use addition	ponse to Agency lette below. nal page(s) if necessa Establishment le	ocation (B	Agency "Me To	nted lebels in repleter deted of Application.  Explain below.		ons.	
			Section - III				
A. Material This Product Will Be Packaged in: Child-Resistant Packaging  Yes  X  No  Certification must  Packaging  If "Yes" Unit Packaging wgt.  No. per Unit Packaging wgt.			X Yes No	No X Plastic Glass  If "Yes" No. per Package wgt container Other (S			
3. Location of Net Contents  X Label	Information Container		tail Container lb, 1lb., 9 oz.,	5. Location o	f Label Direction	ens	
6. Manner in Which Label is	Affixed to Product	× Lithor Paper Stend	glued siled	ther			
			Section - IV				
1. Contact Point (Complete	items directly below	for identification	on of individual to be contact	ed, if necessary,	to process this	application.)	
Thomas C. McEntee						No. (Include Area Code) 95 6856	
	ny knowlingly false or		ation deli attachments thereto ere etement may be punishable b			6. Date Application Received (Stamped)	
2. Signature Thomas C Mc Enter/KDJ			Product Registration Manager				
4. Typed Name Thomas C. McEntee			July 13, 2009				



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

JUL 1 2009

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Bonnie J. Bieber Regulatory Coordinator E.I. du Pont de Nemours and Company DuPont Chemical Solution Enterprise P.O. Box 80402 (E403-3224D) Wilmington, DE 19880-0402

Subject:

Notification in Accordance with PR Notice 98-10

Virkon® S

EPA Registration No. 71654-6 Application Date: June 3, 2009 Receipt Date: June 8, 2009

Dear Ms. Bieber:

This acknowledges receipt of your application, submitted under the provision of PR Notice 98-10, FIFRA section 3(c)9.

#### **Proposed Notification**

Label change due to PR Notice 2007-4

#### **General Comments**

Based on a review of the material submitted, the following comments apply:

The notification is acceptable and a copy has been inserted in your file for future reference.

At your next label amendment amendment you must change Salmonella Choleraesuis to Salmonella enterica.

Should you have any questions concerning this letter, please contact me by telephone at (703) 308-6415 or email address at: <a href="mailto:lantz.tracv@epa.gov">lantz.tracv@epa.gov</a> or Renae Whitaker by telephone at (703) 308-7003 or email at <a href="mailto:whitaker.renae@epa.gov">whitaker.renae@epa.gov</a> during the hours of 8:00 am to 3:30 pm EST. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely,

Tracy Lantz

(Acting) Product Manager (34)
Regulatory Management Branch II
Antimicrobials Division (7510P)

raid sintake



Wilmington, DE 19880-0402



#### **DuPont Chemical Solutions Enterprise**

June 17, 2009

Document Processing Desk Antimicrobials Division (7510P) US Environmental Protection Agency Office of Pesticide Programs; Room S-4900 Ms. Tracy Lantz (PM34) 2777 South Crystal Drive Arlington, VA 22202-4501

Subject: Virkon® S; EPA Registration No. 71654-6

Amendment; PR 98-10 V.A.1, 2 or 3 Reference Your letter of June 2, 2009

Dear Ms. Lantz

Please consider this letter and its attachments as a request for ACCELERATED REVIEW OF MINOR FORMULATION CHANGES under PR Notice 98-10 V.A.1, 2 and 3.

Following your letter of June 2, 2009, I have resubmitted the alternate formulas as amended formulas rather than notification.

In order to be consistent with the PC codes used in NPIRS, I have uniformly changed the Chemical Abstracts Number for the active ingredient, potassium peroxymonosulfate to CAS # 10058-23-8.

Regarding acceptance of a formula with as a fragrance ingredient, please refer to the attached CSF COPY dated January 5, 2004, which was accepted by Adam Heyward October 21, 2004.

Should you have any questions, feel free to call or e-mail.

Sincerely,

Thomas C. McEntee

**Product Registration Manager** 

Thomas.C.McEntee@usa.dupont.com

Perms ( n Ska

(302) 695-6856

DuPont Chemical Solutions Enterprise P. O. Box 80402 Wilmington, DE 19880-0402



#### **DuPont Chemical Solutions Enterprise**

June 17, 2009

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Sincerely,

Thomas C. McEntee

Product Registration Manager

Thomas.C.McEntee@usa.dupont.com

The rows ( in the

(302) 695-6856





#### TRANSMITTAL DOCUMENT

#### Attention:

Ms. Tracy Lantz
Antimicrobials Division (7510P)
US Environmental Protection Agency
Office of Pesticide Programs
Room S 4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

#### NAME AND ADDRESS OF SUBMITTER

E.I.du Pont de Nemours and Company DuPont Chemical Solutions Enterprise Experimental Station (ESL402/3224C) P. O. Box 80023 Wilmington, DE 19880-0402

REGULATORY ACTION IN SUPPORT OF WHICH THIS PACKAGE IS SUBMITTED-Amendment — Accelerted Review of Minor Changes per PR Notice 98-10 - Adjust batch size - for producing locations (Block #2) and country where formulated (Block #6.) Previously accepted alternate formulas

"Virkon® S"; EPA Registration No. 71654-6

Transmittal Date: June 17, 2009

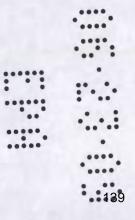
#### **Transmittal Material:**

Volume 1 Administrative Materials

-Cover Letter 1 page
-Application for Pesticide Registration (EPA Form 8570-1) 1 page
-Transmittal Document this page







. Please read instructions on reverse before	cá. Ong form.	Form Appro	B No. 2070-	2041 0060, Approval expires 05-31-98	
₽ EDA	United States conmental Protection Agen Washington, DC 20460	☐ Registr	ration	OPP Identifier Number	
	Application for F	Pesticide - Section	11		
1. Company/Product Number 71654-6 4. Company/Product (Name)		A Product Manager y Mitchell	Proposed Classification      None Restrict		
Virkon S  5. Name and Address of Applicant (Incl. E.I. du Pont de Nemours and Comp DuPont Chemical Solutions Enterp P.O. Box 80402 (E403-3224D) Wilmington, DE 19880-0402 Attn: Bonnie J. Bieber  Check if this is a new address.	rise (b)(l) to: EPA		ar or identical in	I rith FIFRA Section 3(c)(3) in composition and labeling	
· ·		tion - II	•		
Notification - Explain below.  Explanation: Use additional parties and in the second parties of the second par	"Notification of label chance in PR Notice 2007-4 and the require the labeling or the Confidential State EPA. I further understand that if the a	ange per PR Notice 2007-4.  The sements of EPA's regulations are the properties of t	s at 40 CFR §§ 156. oduct. I understand nt with the requiren	that it is a violation of 18 U.S.C. Sec nents of 40 CFR §§ 156.10, 156.140,	
	Sect	tion - III			
1. Material This Product Will Be Packa Child-Resistant Packaging Yes* No  *Certification must be submitted	Unit Packaging  Ves  No  If "Yes"  Unit Packaging wgt.	Water Soluble Pace Yes No If "Yes" Package wgt.	No. per container	2. Type of Container  Metal Plastic Glass Paper Other (Specifiv)	
3. Location of Net Contents Informatio  Label Contain		tainer	On Labe	f Label Directions	
6. Manner in Which Label Is Affixed to	Product Lithograph Paper glued Stenciled	Other			
	Sect	tion - IV			
1. Contact Point (Complete items direct	tly below for identification of individ	ual to be contacted, if nec			
Name Bonnie J. Bieber	Coordinator		Telephone No. (Include Area Code (302) 695-1557		

Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.

3. Title

Regulatory Coordinator
5. Date 6/2/09

Bonnie J. Bieber EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete

under applicable law.

2. Signature

-4. Typed Name

White- EPA File Copy (original), Yellow- Applicant Copy

6. Date Application

Received<sup>c</sup> (Stamped)



#### **DuPont Chemical Solutions Enterprise**

June 3, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard)
2777 South Crystal Drive
Arlington, VA 22202-4501

SUBJECT:

Virkon S

EPA Registration #: 71654-6

Notification of label change per PR Notice 2007-4

#### Dear Sir or Madam:

In accordance with PR Notice 2007-4, E.I. du Pont de Nemours and Company is notifying the Agency of Storage and Disposal Language label language upgrades for the above referenced product. Attached please find the following documents supporting this notification:

> Application for Pesticide Registration (EPA form 8570-1) - dated 6/3/09

> One copy of the label with changes highlighted

This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA."

Please contact me by phone at 302-695-1557 or by email at bonnie.j.bieber@usa.dupont.com if you have any questions.

Sincerely,

Bonnie J. Bieber

Regulatory Coordinator,

E.I. DuPont de Nemours and Company
DuPont Chemical Solutions Enterprise

attachments



## WASHINGTON, D.C. 20460

May 22, 2008

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

OPP Decision Number: D-394021

EPA File Symbol or Registration Number: 71654-6

Product Name: VIRKON S EPA Receipt Date: 20-May-2008 EPA Company Number: 71654

Company Name: E.I. DUPONT DE NEMOURS AND COMPANY

BONNIE J. BIEBER
E.I. DUPONT DE NEMOURS AND COMPANY
DUPONT CHEMICAL SOLUTIONS ENTERPRISE
PO Box 80402
WILMINGTON, DE 19880-0402

SUBJECT: Receipt of Registration Amendment Subject to Registration Service Fee

#### Dear Registrant:

The Office of Pesticide Programs has received your amendment and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: A440

NEW USE; FIRST FOOD USE; WITH EXEMPTION; Reduced Fee: Linked to PRIA Application;

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-6432.

Sincerely, Teresa Oouris

Front End Processing Staff

Information Technology & Resources Management Division

## ISB'S Front-end PRIA Completeness Screen Draft 3; 10/25/07

EPA	Receipt Date:MAY 2 0 2008	EPA Reg. Number:	71654	1-6	
	Check List Item		Yes	No	N/A
1	Has the PRIA Fee been Paid; is a copy of the check or Pay.gov receipt included in the Submission Package?		X		
2	Is an Application Form (EPA Form 8570-1) Included in the Submission Package, is it completely filled out and signed including package type?		X		
3	Is a Confidential Statement of Formula (EPA Form 8570-29) Included in the Submission Package, is it completely filled out and signed (boxes 1-21)?			X	
4	Is a Formulator's Exemption Statement (EPA Form 8570-27) Included in the Submission Package?			X	
5	Is a Certification with Respect to Cit. Form 8570-34) Included in the Submis		X		
6	Is a <b>Data Matrix</b> (EPA Form 8570-35) Submission Package?	Included in the	X		
7	Is a Label Included in the Submission	Package?	X		
8	Arc Data Included in the Submission I	Package?		X	
9	Is the Submission an Amendment?		X		

# PRIA 2 – 21 Day Content Screen Review Worksheet (EPA/OPP Use Only) 3/25/08

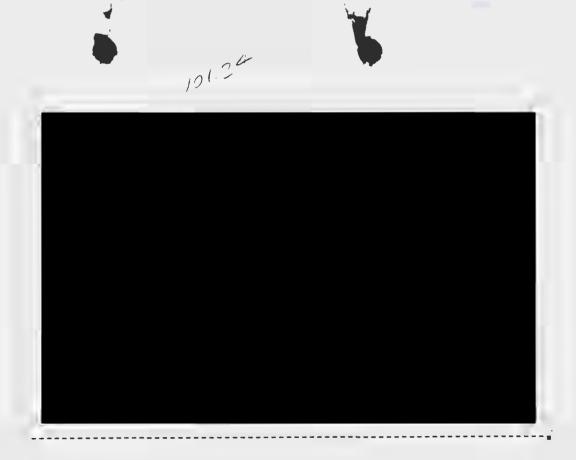
21 D Expe Divi	Day Screen Start Date:  erts In-Processing Signature:  sion contacted on issues No	<u> </u>	Fee 1	Paid: Yo	es_	
EPA	Reg. Number: 71454-6 EPA Receipt Date:	5/20/08	3			
	Items for Review			A	No.	N/A+
1	Application Form (EPA Form 8570-1) signed & complete type	including pac	ckage	/		
	Confidential Statement of Formula all boxes completed, dated (EPA Form 8570-4)	orm signed	and			/
2	a) All inerts, except fragrances, approved for food and non proposed uses (see Footnote A)	food /	no			
3	Certification with Respect to Citation of Data (EPA Form completed and signed (N/A if 100% repack)	8570-34)		/		
	Certificate and data matrix consistent	Secretary of the second		/		
		yes	no			
	If applicant is relying on data that are compensable, is the of to pay statement included, (see Pootnote B)	fer				- 4
	If applicable, is there a letter of Authorization for exclusive	use only.				
4	Formulator's Exemption Statement (EPA Form 8570-27) signed (N/A if source is unregistered or applicant owns the t		,			
	Data Matrix (EPA Form 8570-35) both internal and external completed and signed (N/A if 100% repack)	/				
		yes	no			
5	a) Selective Method (Fee category experts use)	/				
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	Copies of Label			/		
7	Is the data package consistent with PR Notice 86-5					
8	Notice of Filing included with petitions		*	/		

## Fee for Service

### {829500V~

New Registration  • Amendment  Studies? Fee Waiver?  volpay % Reduction:	for Division  • AD  BPPD  RD  Risk Mgr. 34
Receipt No. S-EPA File Symbol/Reg. No. Pin-Punch Date:	71654-6 5/20/2008
Action Code:  Requested: Δημο  Granted: μημο  Amount Due: \$ 26,250	Parent/Child Decisions:
Inert Cleared for Intended Use Reviewer: Mail Jean 3 Remarks: Sec. 3 Related to to	Uncleared Inert in Product  Date: 5/22/08  Lerence fetition # 8F7360

145





The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont Page 1 Material Safety Data Sheet ------\_\_\_\_\_\_ Virkon(R) S Revised 18-AUG-2006 CHEMICAL PRODUCT/COMPANY IDENTIFICATION Product Use Animal Premises' Disinfectant and Cleaner Tradenames and Synonyms "Virkon" is a registered trademark of Antec(tm) Int'l Ltd. Company Identification MANUFACTURER/DISTRIBUTOR DuPont Chemical Solutions Enterprise 1007 Market Street Wilmington, DE 19898 PHONE NUMBERS Product Information : 1-800-441-7515 (outside the U.S. 302-774-1000) Transport Emergency : CHEMTREC 1-800-424-9300 (outside U.S..... 703-527-3887) Medical Emergency : 1-800-441-3637 (outside the U.S. 302-774-1000) ------COMPOSITION/INFORMATION ON INGREDIENTS Components CAS Number Material. Potassium Peroxymonosulfate 70693-62-8 Sulfamic Acid 5329-14-6 Sodium Chloride 7647-14-5 Unique Label Statements KEEP OUT OF REACH OF CHILDREN \* HAZARDS IDENTIFICATION Potential Health Effects Skin contact with product diluted in water according to package directions (1% solution) is not a skin irritant. Skin contact with dry powder may cause skin burns or

Eye contact with product diluted in water according to

ulceration. In rare cases, skin contact with dry powder may cause an allergic skin reaction in sensitive individuals.

#### (HAZARDS IDENTIFICATION - Continued)

package directions (1% solution) is not an eye irritant. Eye contact with dry powder may cause eye corrosion or ulceration. Severe eye damage may result if not immediately treated.

Inhalation of this product may cause nose bleed or irritation of the upper respiratory passages, with coughing, sneezing, runny nose and sore throat. Gross overexposure may cause ulceration of mucous membranes.

Ingestion of this product may cause gastritis, with stomach pain, nausea, vomiting, diarrhea, headache or weakness; possibly progressing to necrosis or hemorrhage with gross overexposure.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for further treatment advice.

IF IN EYES: Hold eye open & rinse slowly & gently with water for 15-20 minutes. Remove contact lenses, if present after 5 minutes, then continue rinsing eye. Call a Poison Control Center or doctor for further treatment advice.

IF INHALED: Move person to fresh air. If person in not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a Poison Control Center or doctor for further treatment advice.

IF SWALLOWED: Call Poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

ANTEC03 DuPont Page 3 Material Safety Data Sheet FIRE FIGHTING MEASURES Extinguishing Media Dry Powder (Sand or Met-L-X), CO2. Fire Fighting Instructions Evacuate personnel to a safe area. Wear self-contained breathing apparatus (SCBA) and full protective equipment. ACCIDENTAL RELEASE MEASURES Safeguards (Personnel) NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up. Spill Clean Up Sweep, shovel, vacuum or scoop up into suitable containers for disposal. Prevent powder from becoming moist while awaiting disposal. Moist product must be kept away from combustible material and stored in a manner that allows suitable ventilation of the waste. \_\_\_\_\_\_ HANDLING AND STORAGE Handling (Personnel) Do not get in eyes, on skin or clothing. Avoid breathing dust. Wash thoroughly after handling. Wash contaminated clothing prior to reuse. Storage Store in a cool, dry place. Keep containers tightly sealed and avoid coming into contact with moisture. EXPOSURE CONTROLS/PERSONAL PROTECTION Engineering Controls Use only with adequate ventilation. Personal Protective Equipment

EYE/FACE PROTECTION

ANTEC03

#### DuPont Material Safety Data Sheet

Page 4

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Wear coverall chemical splash goggles. Additionally, wear a face shield where the possibility exists for face contact due to splashing or spraying of material.

RESPIRATORS Wear NIOSH approved respiratory protection as appropriate.

PROTECTIVE CLOTHING

Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, jacket, hood and boots.

#### # Exposure Guidelines

Applicable Exposure Limits Potassium Peroxymonosulfate

PEL (OSHA) : None Established
TLV (ACGIH) : None Established

AEL \* (DuPont) : 1 mg/m3, 8 & 12 Hr. TWA

Sulfamic Acid

PEL (OSHA) : None Established TLV (ACGIH) : None Established

AEL \* (DuPont) : 0.5 mg/m3, 8 & 12 Hr. TWA 1.5 mg/m3, 15 minute TWA

\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

#### PHYSICAL AND CHEMICAL PROPERTIES

PRISICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point: Decomposes on heating

Solubility in Water: 65 g/litre (8.2 oz/gallon) at 20 C/68 F

Form: Free flowing powder

Color: Yellow Odor: Faint lemon Specific Gravity: ~1.07

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STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.





ANTEC03

#### DuPont Material Safety Data Sheet

Page 5

(STABILITY AND REACTIVITY - Continued)

Incompatibility with Other Materials

Incompatiblity with strong alkalies and moisture. When wet reacts slowly in solution to make small amount of hypochlorous acid or hypochlorite, depending on pH.

Decomposition

Hazardous decomposition products are: sulfur dioxide and chlorine under extreme conditions if powder is allowed to become damp through incorrect storage or long exposure to the atmosphere.

Polymerization

Polymerization will not occur.

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

...........

TRANSPORTATION INFORMATION

Shipping Information

Not Regulated as a hazardous material by DOT, IMO, or IATA.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : Listed.

OTHER INFORMATION

Additional Information

Antec(tm) International Ltd.
A DuPont Company
Windham Road
Chilton Industrial Estates
Sudbury, Suffolk, United Kingdom CO10 2XD

Telephone: 44-(0)-1787-377305

Print Date: 4<sub>15</sub>29 - 2008

ANTEC03

#### DuPont Material Safety Data Sheet

Page 6

(Continued)

EPA Reg. No. 71654-6

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsible for MSDS: MSDS Coordinator

> : DuPont Chemical Solutions Enterprise

Address : Wilmington, DE 19898

Telephone : (800) 441-7515

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS

Print Date: 4<sub>15</sub>29 - 2008

### Virkon® S Disinfectant and Virucide

#### BROAD SPECTRUM DISINIFECTANT, FUNGICIDE & ALGAECIDE [OPT]

[Fragrance Free] [Reduced Dye] [Fragrance and Dye Free] {OPT}

For Use in Cleaning and Disinfecting Industrial, Animal and Agricultural Facilities
For Use in Emergency Disease Control [OPT]

Effective against
•Viruses
Including Canine Parvovirus [OPT]
•Bacteria
•Fungi

**ACTIVE INGREDIENTS:** 

Potassium peroxymonosulfate	21.41%
Sodium Chloride	1.50%
OTHER INGREDIENTS	77.09%
TOTAL	100.00%

Equivalent to 9.75% Available Chlorine

## KEEP OUT OF REACH OF CHILDREN DANGER/PELIGRO

See Inside Booklet for Additional Precautions

POWDER FORM [OPT]

TABLET FORM [OPT]

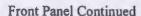
SACHET FORM [OPT]

Copyright © 2006-2008 E. I. du Pont de Nemours and Company All Rights Reserved.

Virkon® S is a registered trademark of and manufactured by Antec International Ltd., a DuPont Company

EPA Reg. No. 71654-6

EPA Est. No. XXXXX-YY-ZZZ



FIRST AID					
If in Eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present after 5 minutes, then continue rinsing eye.</li> <li>Call a Poison Control Center or doctor for further treatment advice.</li> </ul>				
If on Skin or Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control Center or doctor for further treatmen advice.</li> </ul>				
If Swallowed:	<ul> <li>Call Poison Control Center or doctor immediately for treatment advice.</li> <li>Have Person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person</li> </ul>				
	HOT LINE NUMBER				

For 24-hour emergency information on this product, call 1-800-3637 (US & Canada) or 1-302-774-1100 (all other areas). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for:
E.I. DuPont de Nemours and Company
PO Box 80023
Wilmington, DE 19880-0023
Questions? Call 1 800 441-7515

US Patent No. 4822512

#### EFFECTIVE AGAINST THE FOLLOWING PATHOGENS:

#### ANIMAL AND ZOONOTIC PATHOGENS

#### **BACTERIA**

Actinobacillus pleuropneumoniae Bacillus cereus Brucella abortus Campylobacter jejuni Clostridium perfringens Dermatophilus congolensis Escherichia coli Klebsiella pneumoniae Mycoplasma gallisepticum Pasteurella multocida Pseudomonas aeruginosa Salmonella choleraesuis Salmonella typhimurium Shigella sonnei Staphylococcus aureus Staphylococcus epidermidis Streptococcus pyogenes Streptococcus suis

Not approved in California for use against the following bacteria: Bordetella avium Bordetella bronchiseptica Fistulous withers (Poll Evil) Haemophilus somnus Helicobacter pylori Listeria monocytogenes Moraxella bovis (Pink Eye) Mycoplasma hyopneumonia Mycoplasma mycoides Pseudomonas mallei (Glanders) Pseudomonas vulgaris Streptococcus equi (Strangles) Taylorella equigenitalis Treponema hyodysenteriae

#### **VIRUSES**

Avian Influenza Virus
Avian Laryngotracheitis Virus
Bovine Adenovirus Type 4
Canine Adenovirus (Canine Hepatitis)
Canine Parvovirus
Equine Herpes Virus (Type 1)
Herpes Virus Equine (Type 3)
Equine Influenza Virus (Type A)
Feline Calicivirus
Feline Panleukopenia Virus
Feline Rhinotracheitis Virus
Newcastle Disease Virus
Simian virus (SV40 Virus)

Not approved in California for use against the following viruses: Adenovirus Pneumonia African Horse Sickness Virus African Swine Fever Virus (tested with 1% soil load and 342 ppm hard water) Bovine Polyoma Virus Bovine Pseudocowpox Virus Bovine Viral Diarrhea Virus (no hard water) Calf Rotavirus (no hard water) Canine Coronavirus Canine Parainfluenza Virus Chicken Anemia Virus Coital Exantherma Virus Distemper Virus Duck Adenovirus (no hard water) **Duck Enteritis Virus** Egg Drop Syndrome Adenovirus Equine Infectious Anemia Virus (Swamp Fever) Equine Arteritis Virus (no hard water)

#### Not approved in California cont.

Hog Cholera Virus Equine Contagious Abortion Virus Equine Papillomatosis Virus Equine Influenza Virus (The Cough) Feline Herpes Virus Feline Infectious Peritonitis Virus Feline Parvovirus Foot and Mouth Disease Virus Infectious Bronchitis Virus Infectious Bursal Disease Virus Infectious Canine Hepatitis Virus Infectious Pancreatic Necrosis Virus Infectious Salmon Anaemia Virus Infective Bovine Rhinotracheitis Virus (no hard water) Leptospira Canicola Virus Maedi- Visna Virus Marek's Disease Virus Mouse Parvovirus PCV2 Virus (PMWS) Porcine Parvovirus Porcine Reproductive and Respiratory Syndrome Virus (PRRS) Pseudorabies Virus (Aujesky's Disease) (no hard water) Rotaviral Diarrhea Virus Snakehead rhabdovirus Swine Influenza Virus Swine Vesicular Disease Virus Transmissible Gastroenteritis Virus (TGE) (no hard water) Turkey Herpes Virus (no hard water) Turkey Rhinotracheitis Virus Vesicular Stomatitis Virus



#### **FUNGI**

Trichophyton mentagropphytes (2%)

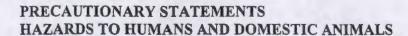
Not approved in California for use against the following fungi:
Aspergillus fumigatus
Fusarium moniliforme
Microsporum canis
Trichophyton spp. (Ringworm)
Trichophyton spp. (Mud Fever)

#### PLANT PATHOGENS

Not approved in California for use against plant pathogens:

Alernaria solani
Botrytis cinera
Colletotrichum coccodes
Didymella bryoniae
Fusarium oxysporum
Fusarium solani
Penicillium oxalicum
Phomopsis sclerotioides

Pyrenochaeta lycoopersici Pythium aphanidermatium Rhizoctonia solani Sclerotinia sclerotiorum Thielaviopsis basicola Verticillium dahliae Xanthomonas axonopodis



DANGER. Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use solution.

#### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

#### **BROAD SPECTRUM DISINFECTANT**

Virkon® S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts), and mycoplasma. Efficacy of the 1% solution against bacteria and viruses was determined in the presence of 400 ppm [200 ppm in California] AOAC hard water and 5% organic material in most cases. The exceptions are noted with qualifiers, e.g., "no hard water," "no soil load," and "use 2% solution."



It is a violation of Federal law to use this product in a manner inconsistent with its labeling

#### GENERAL INSTRUCTIONS—POULTRY AND FARM PREMISES

- 1. Remove all poultry or other animals and feeds from premises, trucks or other vehicles, coops, crates or other enclosures.
- 2. Remove all litter droppings and manure from floors, walls and surfaces of barns pens, stalls, chutes and other facilities and fixtures occupied or traversed by poultry or other animals.
- 3. Empty all troughs, racks, and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
- 5. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes.
- 6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
- 7. Ventilate buildings, cars, boats, coops, and other closed spaces. Do not house poultry or livestock or employ equipment until treatment has been absorbed, set, or dried.
- 8. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

#### Virkon® S DILUTION CHART

Fill container with desired amount of water and add Virkon® S powder or tablet(s) to achieve recommended solution concentration. [For a 1% solution, add one (1) tablet to one pint of water. OPT.] [For a 1% solution, empty one 1.3 oz. sachet into 1 gallon of water. OPT]

#### Powder

Quantity of 0.5% Solution* Water		1% Solution	2% Solution	
1 Quart	0.15 ounces*	0.3 ounces	0.7 ounces	
1 Gallon	allon 0.65 ounces* 1.3 ounces		2.7 ounces	
10 Gallons	6.7 ounces*	13.4 ounces	26.7 ounces	
50 Gallons	33.4 ounces*	66.8 ounces	133.5 ounces	

#### Measuring cup provided.

#### Tablet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 Pint		1 tablet	2 tablets
1 Quart	1 tablet*	2 tablets	4 tablets
1 Gallon	4 tablets*	8 tablets	16 tablets

<sup>\*</sup> The 0.5% solution currently is not approved for use in California.





#### Sachet

Quantity of Water	0.5% Solution*	1% Solution	2% Solution
1 gallon	-	1 Sachet	2 Sachets
2 Gallons	1 Sachet	2 Sachets	4 Sachets

<sup>\*</sup> The 0.5% solution is currently not approved for use in California.

Solutions are stable for 7 days. Do not soak metal objects in Virkon® S for long periods - 10 minutes is maximum necessary contact time. One gallon of solution is sufficient to treat 135 sq. ft. [This powder formulation is easily diluted for use in manual or machine operations. OPT.]

#### POULTRY PRODUCTION AND RATITE PRODUCTION

CONTROLS: Viruses of Newcastle Disease, Avian Laryngotracheitis and Avian Influenza; Bacteria of Streptococcus pyogenes, Klebsiella pneumoniae, Escherichia coli, Salmonella typhimurium, Salmonella chloeraesuis, Pseudomonas aeruginosa, Staphylococcus aureus, Staphylococcus epidermidis and Mycoplasma gallisepticum. Not approved in California for use against the following organisms: Viruses of Infectious Bursal Disease, Infectious Bronchitis Virus, Marek's Disease, Egg Drop Syndrome, Turkey Herpes Virus, Duck Viral Enteritis; FUNGI (molds and yeasts) Aspergillus flavus, Fungi of Aspergillus fumigatus and Bacteria of Bordetella avium, Helicobacter pylori.

HATCHERIES: Virkon® S at 1% solution can be used for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes.

Virkon® S at 1-2% solution is recommended for use in fogging (wet misting) operations as a supplemental measure, either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Follow General Instructions to remove poultry and preclean area to be treated. Spray floors and walls with Virkon® S at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of Virkon® S. After contact for 10 minutes, rinse with water. Do not house poultry or use equipment until treatment has dried.

FOR AIR SANITIZING: Not approved for this use in California: Use Virkon® S at 0.5-1% solution, and fog until surfaces are moist. Allow at least 2 hours before entering treated area. Rinse foggers and sprayers with water following use.

PROCESSING PLANTS: Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings and floors.

#### **SWINE PRODUCTION**

CONTROLS: Bacteria of Actinobacillus Pleuropneumoniae and Clostridium perfringens;. Not approved in California for use against the following organisms: Viruses of Hog Cholera, Swine influenza, Porcine Parvovirus, Porcine Reproductive and Respiratory Syndrome Virus (PRRS); Pseudorabies, Rotoviral Diarrhea, African Swine Fever, Fungi of Fusarium moniliforme Foot and Mouth Disease and Bacteria of Treponema hyodysenteriae.

Follow General Instructions to remove swine and preclean area to be treated. Virkon® S at 1% solution is recommended for cleaning and disinfecting farrowing units, nurseries, finisher houses, processing plants, and agricultural production equipment such as trucks, waterproof footwear (such as rubber boots), and associated livestock equipment and instruments.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Not approved in California for fogging at dilutions less than 1%. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

#### Aerial Disinfection in the Presence of Poultry and Swine

Spraying a fine disinfectant mist or fog in premises, even in the presence of poultry and swine can help control and prevent the spread of viruses.

Apply Virkon® S Disinfectant and Virucide at a dilution rate of 1:200 (0.5%) at an application rate of 1 gallon per 430ft² of floor space daily. Use a mechanical (cold fogger) or plumbed in misting system designed for water-based applications, with a droplet size of greater than 50 microns, or a pressure washer/knapsack or tank sprayer to deliver a very fine mist.

Thermal foggers are not recommended as the noise will disturb the birds.

Note: Individuals should avoid entering the building or room while aerial disinfection is in progress. If the building or room must be entered, then the individuals entering must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long shirt sleeves and pants.

#### **EQUINE PRODUCTION**

BROAD SPECTRUM EQUINE DISINFECTANT/DETERGENT/WASH FOR CLEANING AND DISINFECTING STABLES, EQUIPMENT, AND AERIAL DISINFECTION

CONTROLS: Not approved in California for use against the following organisms: Fungi of Fusarium moniliforme. Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exantherma, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious anemia (Swamp Fever), Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis; Bacteria of Clostridial Diarrhea, Fistulous Withers (Poll Evil), Taylorella equigenitalis, Bordetella bronchiseptica, Streptococcus equi (Strangles) and Pseudomonas mallei (Glanders); Fungi of Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).



APPLICATIONS: For cleaning and disinfecting all hard, non-porous surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

USES: Stables, Horse Boxes, Box Stalls, Tack, Equipment, and Feed Rooms: Thoroughly clean and dry [dry clean] surfaces, then wash the area manually or with pressure washer with a 1% Virkon® S solution. Rinse with clean water.

Blankets, Saddle Pads and Rugs: Not an approved use in California: Shampoo by hand or spray lightly with a hand-sprayer and leave to dry. Shake or vacuum to remove residue. Aerial Spraying to control airborne diseases: Not an approved use in California: Use a hand or knapsack sprayer with fine setting, or an automatic spraying system. Spray a 1% Virkon® S solution for 2-3 minutes twice daily, first thing in the morning and last thing at night. Rinse sprayers with water after use.

#### **BOVINE PRODUCTION**

CONTROLS: Bovine Adenovirus Type 4; Not approved in California for use against the following organisms: Bacteria of Moraxella bovis and Fungi of Fusarium moniliforme. Viruses of Calf rotavirus, Infectious Bovine Rhinotracheitis, Pseudorabies, Foot and Mouth Disease and Bacteria of Haemophilus somnus.

Follow General Instructions to remove livestock and preclean area to be treated. A 1% solution of Virkon<sup>®</sup> S is recommended to clean and disinfect areas associated with bovine housing stabling, hospital quarantine pens, feedlot facilities, and agricultural production equipment: such as trucks, water-proof footwear (such as rubber boots), and associated livestock equipment and instruments.

#### COMPANION ANIMALS

CONTROLS: Viruses of Canine Parvovirus and Feline calicivirus; Bacteria of Staphylococcus aureus, Streptococcus pyogenes, Klebsiella pneumoniae, and Pseudomonas aeruginosa. *Not approved in California for use against the following organisms:* Viruses of Distemper, Leptospira canicola, Feline parvovirus, Feline herpes; Fungi of Microsporum canis.

APPLICATIONS: A 1% solution of Virkon® S is recommended as a "one step" cleaning and disinfecting procedure (Remove Gross filth and heavy soil deposits before application of the disinfecting/cleaning solution) for all surfaces, equipment, instruments, utensils and cages [caging systems] within [associated with] Veterinary Medical Hospitals, infections disease wards, quarantine areas, Humane Society facilities, laboratory animal quarters, grooming and boarding facilities, kennels, catteries and animal transportation vehicles.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.

#### GREENHOUSES AND HORTICULTURE

Virkon<sup>®</sup> S is intended to disinfect inanimate environmental surfaces: such as floors, walls, glasshouse structures, ventilation and other equipment, utensils, trays, and other containers, water systems, evaporative coolers, storage rooms, and vehicles in greenhouses and other horticultural settings prior to introduction or reintroduction of plants, seeds, or soil. Not approved in California for use on ventilation and other equipment and water systems. It is not



intended to directly affect agricultural production and must not be applied to plants, seeds, or soil. If necessary, remove or cover these items prior to use of the product.

For surfaces and equipment

- 1) Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt.
- 2) Use a dilution of 1:100 or 1.3 oz. Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits. Not approved in California for use at 1:50 dilution on surfaces that have not been pre-cleaned with water to removed organic deposits.
- 3) Apply solution with mop, sponge, power sprayer, or fogger to thoroughly wet all surfaces.
- 4) Heavy growth of algae or fungi may have to be scrubbed off following application.
- 5) Reapply as often as needed for control.

For clean non-porous surfaces

Pots, flats, trays: Use a dilution of 1:100 or 1.3 oz. per gallon of clean water. Soak tools to ensure complete coverage.

Work areas: Sweep and remove all plant debris. Use power sprayer to wash all surfaces to remove loose dirt. Use a dilution of 1:100 or 1.3 oz. of Virkon® S per gallon of clean water. Use a dilution of 1:50 or 2.6 oz. of Virkon® S per gallon of clean water if surfaces that are to be treated have not been pre-cleaned with water to remove organic deposits.

For evaporative coolers *Not approved use in California*:: treat existing algae and slime-contaminated surfaces with a 1:100 dilution of Virkon® S. Treat cooler water every week with a dilution of 1:200 or 0.65 oz. of Virkon® S for every gallon of cooler water.

Virkon® S may also be used to disinfect irrigation tanks and lines. Not approved use in California: Run a 1% solution through the system or soak equipment in a 1% solution. Let stand for ten minutes and flush system with clean water after treatment.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.



#### AQUACULTURE

Not approved for this use in California

Virkon<sup>®</sup> S is intended to disinfect inanimate environmental surfaces associated with aquaculture including vehicles, nets, boots, waders, dive suits, hoses, brushes and other similar equipment. Virkon<sup>®</sup> S may also be used in foot dips. Virkon<sub>®</sub> S must not be applied directly to water.

Equipment used in separate sites, tanks, ponds in aquacultural settings should be disinfected before each new use by soaking for 20-30 minutes in a 1% Virkon® S solution followed by a water rinse.

Virkon® S at 0.5-1% solution is recommended for use in fogging (wet misting) operations or as a supplemental measure either before or after regular cleaning and disinfecting procedures. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions. Rinse foggers and sprayers with water following use.

#### EMERGENCY DISEASE CONTROL (ANIMAL HEALTH)

Not approved for this use in California

CONTROLS: OIE List A Disease organisms including Foot and Mouth Disease Virus, African Horse Sickness Virus, Vesicular Stomatitis Virus, Classical Swine Fever Virus (Hog Cholera Virus), African Swine Fever Virus, Newcastle Disease Virus, and Highly Pathogenic Avian Influenza Virus, Swine Vesicular Disease Virus, and Mycoplasma mycoides (Contagious Bovine Pleuropneumonia). (OPT.)

A 1% solution of Virkon<sub>®</sub> S is recommended to clean and disinfect agricultural facilities and equipment, military facilities and equipment; airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment, and other shipping facilities and equipment where animals or soils suspected of harboring foot and mouth disease virus might have been previously present.

Within these facilities, treated objects include but are not limited to vehicles, farm equipment (including tractors, ploughing shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (pallets, bins, and containers).

Spray Virkon® S at 1% solution to disinfect and clean walls, ceilings, floors, decks, container surfaces, vehicles, wheels, water proof footwear (such as rubber boots), livestock equipment, utensils and instruments.

Do not immerse metal objects in Virkon® S for long periods - 10 minutes is maximum contact time.



Not approved for this use in California

The instructions above call for use of a 1% solution for general disinfection, however, Virkon® S is effective against the following disease organisms at the dilution rates specified below. If the threat is known and limited to one of the organisms below, Virkon® S may be used at the following dilution rates:

Disease Organism	Dilution rate	Oz./Gal.
PCV2 Virus (PMWS)	1:200	0.7

#### USES IN FACILITIES USED FOR TEMPORARY CONFINEMENT OF ANIMALS

A 1% solution of Virkon® S is recommended to clean and disinfect inanimate surfaces associated with facilities used for the temporary confinement of animals. Sites may include, but are not limited to, barns, sheds, stables, pens, cages, and associated access alleys or walkways. Virkon® S may also be used to clean and disinfect equipment related to the maintenance of animals found at fairs, exhibitions, animal auction yards, animal show/boarding facilities, or other similar agricultural facilities designed for the temporary housing of animals.

To ensure that Virkon® S does <u>not</u> come in direct contact with animals, feed, or water, remove animals from treatment site and either remove or cover feed and water apparatus. To ensure precise application on inanimate surfaces, Virkon® S may only be applied using hand-held sprayers, sponges on other absorbent materials. Do not allow Virkon® S to pool on surfaces that may be within reach of animals. Do not allow Virkon® S to come into direct contact with people. Allow Virkon® S to completely dry prior to housing animals, using equipment, or allowing people to contact treated sites.

#### STORAGE AND DISPOSAL

STORAGE: Store in a cool, dry place in tightly closed container away from children. Always replace lid after use.

DISPOSAL: Wash empty container thoroughly and dispose in trash. Do not mix this product with other chemicals.

entitled to confidential treatment\* \*Commercial/financial information may be

US GOVT ENVIRONMENTAL PROTECTION AGENCY 1005 CONVENTION PLAZA SL-MO-C2-GL GOVT LOCKBOX 979074 SAINT LOUIS, MO 63197

DOCUMENT NO.	INVOICE NO.	DATE	GROSS	DISCOUNT	NET
1707268517 MM1013952	04/28/08	04/28/08 26,250.00		26,250.00	
		TOTALS	\$26,250.00	0.00	\$26,250.00

Questions regarding faster deposits through Electronic Funds Transfers, Please e-mail DPS.Wilm@USA.Dupont.com; For payment questions, please e-mail AP2@USA.DuPont.com

Attachment Check # 3000091457

PAY TO THE ORDER OF

#### THE FACE OF THIS CHECK IS PRINTED BLUE - THE BACK CONTAINS A SIMULATED WATERMARK



E. I. DUPONT DE NEMOURS & COMPANY DuPont Payment Services P. O. Box 80040 Wilmington, DE 19880-0040

US GOVT

No. 3000091457

05/14/08

ENVIRONMENTAL PROTECTION AGENCY 1005 CONVENTION PLAZA SL-MO-C2-GL GOVT LOCKBOX 979074 SAINT LOUIS, MO 63197

\$20,250.00

Twenty six thousand two hundred fifty and 00/100 Dollars

CITIBANK N.A. A SUBSIDIANY OF CITICORP ONE PENN'S WAY NEW CASTLE, DE 19720



# LEWIS & HARRISON

122 C Street, N.W., Suite 740 Washington, D.C. 20001

telephone 202.393.3903 fax 202.393.3906

**Consultants in Government Affairs** 

May 7, 2008

Document Processing Center [REGFEE] U.S. Environmental Protection Agency Room S-4900, One Potomac Yard 2777 South Crystal Drive Arlington, VA 22202-4501

ATTN:

Adam Heyward, PM 34

SUBJECT:

Virkon® S: (EPA Reg. No. 71564-6)

Application for Petition for Tolerance Exemption and Amended

Registration of a Registered Product

2008 PRIA Category A440 (First food use, establish tolerance exemption)

Dear Mr. Heyward:

On behalf of E.I du Pont de Nemours and Company (DuPont), I am submitting a petition and an application for amended registration of their product, Virkon<sup>®</sup> S. Virkon<sup>®</sup> S contains the active ingredient, Potassium peroxymonosulfate.

There are existing registrations for this product. This will be the first food use for this chemical.

DuPont is submitting a petition and an amended registration for a new use for an old chemical. This registration is proposing the use of this chemical in poultry and swine premises. Application will not be made to the animals themselves, but the animals may be present when application is made.

The presently registered Virkon agricultural premise use does not permit application to be made when the poultry and swine are present. The animal presence during application makes the proposed use a food use and could require the submission of additional data. However, EPA has previously reviewed du Pont data to elucidate the nature of the residue data that could occur from the use. A letter from the U.S. EPA dated January 29, 2008, from Mr. Adam Heyward to Dr. Thomas McEntee, du Pont included an attachment dated 1/24/08 from Dr. William Hazel et al to Mr. Adam Heyward. The attachment stated, "that an exemption from the requirement of a tolerance appears to be appropriate for residues of potassium peroxymonosulfate and sodium chloride when applied to poultry premises when poultry are present".

167

The January 29 letter also states that, "the Agency has also considered data needs for all other disciplines including occupational/residential exposure, environmental fate, ecological effects, and toxicology. No additional data are necessary for any of these disciplines to support this proposed amended use or petition for exemption from the requirement of tolerances in eggs; poultry, meat; poultry, fat; and poultry, meat byproducts". We believe that this conclusion for poultry can also be extended to include swine. I am attaching a copy of the Agency communication and science review.

This amended registration and proposed tolerance exemption also includes a proposed exemption from the requirement of a tolerance for swine, meat; swine, fat; and swine, meat byproducts.

Enclosed please find the enclosed documents in support of this amended registration:

- 1. Petition for a tolerance exemptions for residues of potassium peroxymonosulfate and sodium chloride when applied to swine and poultry premises;
- 2. Amended Virkon® S registration for this new use for an old chemical;
- 3. Five copies of the Proposed Product Labels;
- 4. Certification with Respect to Citation of Data Form (EPA Form 8570-34);
- 5. Data Matrices (EPA Form 8570-35);
- 6. Copy of the EPA Letter from Mr. Heyward to DuPont and of the science review from Dr. William Hazel et al.
- 7. DuPont MSDS for Virkon<sup>®</sup> S, Revised 18-Aug-2006

The data to support this petition has been reviewed by EPA and is in the MRID No. cited below:

Study Title: Ion Chromatographic and Iodometric Titration Studies of Test Substance H-26820, EPA Reg. No. 71654-6; MRID No. 47115101

This amendment and tolerance petition are subject to PRIA Category A440, with a \$26,250 fee and 21 months review period. Footnote 1 of the PRIA Pre-Pay Antimicrobial - Action Codes and Fee Table states that, "All uses (food and/or non-food) included in any original application or petition for a new active ingredient or a first food use that otherwise satisfy the conditions for the category are covered by the base fee for that application". Based on this, no additional fee is required to support the corresponding label amendment.

Thank you for your assistance with this application. If you have any questions about this submission, please call me at (202) 393-3903 ext. 14 or e-mail me at eharrison@lewisharrison.com.

Sincerely, Legy Eliot Harrison

E.I. du Pont de Nemours and Company

	e before c	ng form.	Form Appro	OMB No. 2070-0	060
<b>⇔</b> EPA	Environment	nited States tal Protection Agen ngton, DC 20460	Allion	tration dment - Reregistrati	OPP Identifier Number
		Application for	Pesticide - Section	on I	
1. Company/Product Number EPA Reg. No. 71654-6 4. Company/Product (Name)			A Product Manager n Heyward	* *	Proposed Classification      None Restricted
Virkon® S			34		
5. Name and Address of Applica E.I. duPont de Nemours DuPont Chemical Soluti P. O. Box 80402 Wilmington, De 19880-0 PLEASE SEND ALL C "CONTACT POIN!	ons Enterpris 402 ORRESPOND T" LISTED B	to: EPA  DENCE TO  Proc		ar or identical in	
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## TED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 1.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

Certifica	tion with Respe	ct to Citation	of Data	
Applicant's/Registrant's Name, Address and Telephone I E.I. duPont de Nemours and Company, DuPont Chemical 80402, Wilmington, DE 19880-0402. Tel: (302) 695-6856	Solutions Enterpri	se, P. O. Box	EPA Registration 71654-	6
Active Ingredient(s) and/or representative test compound Potassium peroxymonosulfate	d(s):		Date	
General use pattern(s) (list all those claimed for this proc Pets and domestic animals and their man-made prer		Part 158)	Product Name Virkon® S	
NOTE: If your product is a 100% repackaging of anothe do not need to submit this form. You must submit the Fo				es en your label, you
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SECT	ON II: GENERA	L OFFER TO	PAY	••••
[Required if using the cite-all method or when using the	cite-all option unde	er the selective	method to satisfy one or more	data retuirements]
☐ I hereby offer and agree to pay compensation, to oth FIFRA.				
S	ECTION III: CEF	RTIFICATION		
I certify that this application for registration, this or cited in the application for registration, the form for reselective method is indicated in Section I, this application effects of this product or an identical or substantially sind data that would be required to be submitted under the application sought the initial registration of a product of	eregistration, or the content of the	is Data Call-li y all data in the one or more of s in effect on the or composition	n response. In addition, if cite-a e Agency's files that (1) concern the ingredients in this product; ne date of approval of this appli- and uses.	all option under the n the properties or and (2) is a type of cation if the
I certify that for each exclusive use study cited I have obtained the written permission of the original su			r reregistration, that I am the or	iginal submitter or that
I certify that for each study cited in support of the original data submitter; (b) I have obtained the writt application; (c) all periods of eligibility for compensation notified in writing the company that submitted the study 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to comme paid for the use of the study.	en permission of have expired for and have offered	the original da the study; (d) I (i) to pay cor	ta submitter to use this study in the study is in the public literat npensation to the extent require	usupport of this ure; or (e) I have ed by sections
I certify that in all instances where an offer of their delivery in accordance with sections 3(c)(1)(F) an request. Should I fail to produce such evidence to the cancel or suspend the registration of my product in cor	d/or 3(c)(2)(B) of Agency upon req	FIFRA are ava uest, I underst	ailable and will be submitted to	the agency upon
I certify that the statements I have made on acknowledge that any knowingly false or misleading applicable law.				
Signature C 0 11	Date	Typed o	r Printed Name and Title	
Signature ECM	Date 5/7/2		rrison, Agent for E.L du Pont de Nen	nours, DuPont Chemical



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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

Form Approved OMB No. 2070-0060

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		DATA MATRIX			
ate April 24, 2008			EPA Reg. No./File Symbol 7165	4-6	Page 1 of
pplicant's/Registrant's Name .l. du Pont de Nemours ar .O. Box 80023, Wilmingto	nd Company		Product Virkon® S Disinfectant and	Virucide	
ngredient(s): Potassium perox	ymonosulfate (CAS # 70693-62-8); sodium chloride	(CAS # 7647-14-5)			
uideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	Beginning Materials	41057401	A.H. Robbins	OLD	
830.1600	Description of Materials Used to Produce the Product	41057401	A.H. Robbins	OLD	
830-1650/61-2	Description of formulation process	41057401	A.H. Robins	OLD	
830-1650/61-2	Description of formulation process	46166002	DuPont	OWN	
830-1670/61-3	Discussion of formulation impurities	41057401	A.H. Robins	OLD	
830.1700	Preliminary Analysis	No MRID assigined	DuPont	OWN	
830.1750	Certified Limits	46617503	DuPont	OWN	
830.1800/62-3	Enforcement Analytical Method	46617501	DuPont	OWN	
830.1800/62-3	Enforcement Analytical Method	41057401	A.H. Robins	OLD	
830.6302/63-2	Color	41057401	A.H. Robins	OLD	
830.6303/63-3	Physical State	41057401	A.H. Robins	OLD	
830.6304/63-4	Odor	41057401	A.H. Robins	OLD	
830.6314/63-14	Oxidation/Reduction: Chemical Compatibility	41057401	A.H. Robins	OLD	
830.6314/63-14	Oxidation/Reduction: Chemical Compatibility	46617502	DuPont		
830.6315/63-15	Flammability	NA			
830.6316/63-16	Explodability	NA			
830.6317/63-17	Storage Stability	40439301	DuPont	OWN	
830.6317/63-17	Storage Stability	41057401	A.H. Robins	OLD	
830.6317/63-17	Storage Stability	42092401°		OLD	
830.6317/63-17	Storage Stability	46943701	DuPont	OWN	



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		DATA MATRIX			
Date April 24, 2008			EPA Reg. No./File Symbol 71654	-6	Page 2 of
Applicant's/Registrant's Name E.l. du Pont de Nemours ar P.O. Box 80023, Wilmingto	nd Company		Product Virkon® S Disinfectant and \	/irucide	
Ingredient(s): Potassium perox	ymonosulfate (CAS # 70693-62-8); sodium chloride	(CAS # 7647-14-5)			
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6320/63-20	Corrosion Characteristics	41057401	A.H. Robins	OLD	
830.6320/63-20	Corrosion Characteristics	46943701	DuPont	OWN	
830.7000	рН	46617502	DuPOnt	OWN	
830.7100/63-18	Viscosity	NA			
830.7300	Bulk Density	46617502	DuPont	OWN	
71-2	Avian Acute Dietary: Bobwhite Quail	00020457	Dearborn	OLD	
71-2	Avian Acute Dietary: Mallard Duck	00020458	Dearborn	OLD	
850.1400/72-4	Fish ELS: Rainbow Trout & Bluegill Sunfish	00019852	Dearborn	OLD	
850.1400/72-4	Fish ELS: Sheepshead minnow	47143401	DuPont	OWN	
870.1100/81-1	Acute Oral Toxicity	41057102	A.H. Robins	OLD	
870.1200/81-2	Acute Dermal Toxicity	41057103	A.H. Robins	OLD	
870.1300/81-3	Acute Inhalation Toxicity	41057104	A.H. Robins	OLD	
870.1300/81-3	Acute Inhalation Toxicity	42591201	DuPont	OWN	
870.2400/81-4	Primary Eye Irritation	41057105	A.H. Robins	OLD	
870.2400/81-4	Primary Eye Irritation	41057106	A.H. Robins	OLD	
870.2400/81-4	Primary Eye Irritation	44242001	: : DaPont	OWN	
870.2500/81-5	Primary Dermal Irritation	41057107	A.H. Robins	OLD	
870.2500/81-5	Primary Dermal Irritation	41057108	* A.H. Robins	OLD	
870.2500/81-5	Primary Dermal Irritation	44242002	DuPont	OWN	
870.2600/81-6	Skin Sensitization	41057109°	A.H. Robins	OLD	
82-1	90-Day Oral Toxicity	00138801°.	QuPont	OWN	
82-4	90-Day Inhalation Toxicity	00138806	DuPont	OWN	
84-2	In vitro Mutatgenicity Studies	00138803	Dupont	OWn	
Signature Wfu	h		Name and Title: Eliot I. Harrison, Consult to E.I.		Date April 24, 200



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		DATA MATRIX	(			
Date April 24, 2008			EPA Reg. No./File Symbol 71654-6		Page 3 of 4	
Applicant's/Registrant's Name & Address: E.I. du Pont de Nemours and Company P.O. Box 80023, Wilmington DE 19880			Product Virkon® S Disinfectant and Virucide			
Ingredient(s): Potassium perox	ymonosulfate (CAS # 70693-62-8); sodium chloride (	CAS # 7647-14-5)				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
91-2	Efficacy	41057410	DuPont	OWN		
91-2	Efficacy	45637101	DuPont	OWN		
91-2	Efficacy: AOAC Use Dilution: E. coli, K. pnemoniae, S. epidermidis, S. typhimurium, S. pyogenes	46166001	DuPont	OWN		
91-2	Efficacy: AOAC Use Dilution: S. aureus, S. choleraesuis	46166003	DuPont	OWN		
91-2	Efficacy	46166004	DuPont	OWN		
91-2	Efficacy	46166006	DuPont	OWN		
91-2	Efficacy: AOAC Use Dilution: L. monocytogenes	46166007	DuPont	OWN		
91-2	Efficacy	46166008	DuPont	OWN		
91-2	Efficacy	46166009	DuPont	OWN		
91-2	Efficacy	46166011	DuPont	OWN		
810.2100/91-2	Efficacy: Virucidal: Porcine Circovirus	46166019	DuPont	OWN		
91-2	Efficacy: Virucidal:	46265002				
810.2100/91-2	Efficacy: Virucidal: Hepatitis A Virus	46266201	- DuPont	OWN		
810.2100/91-2	Efficacy: Virucidal: Duck Hepatitis B Virus—Initial	46266202	Dullont	OWN		
810.2100/91-2	Efficacy: Virucidal: Duck Hepatitis B Virus—Confirmatory	46266203	DuPont	OWN		
810.2100/91-2	Efficacy: Virucidal: Bovine Viral Diarrhea Virus (BVDV)—Initial	46266204	DuPont	OWN		
810.2100/91-2	Efficacy: Virucidal: Bovine Viral	46266205	DuPont	OWN		

Signature

Early

Name and Title: Eliot I. Harrison, Consult to E.I. du Pont de Nemours Date April 24, 2008



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		DATA MATRI	X			
Date April 24, 2008			EPA Reg. No./File Symbol 71654-6		Page 4 of 4	
Applicant's/Registrant's Name E.I. du Pont de Nemours an P.O. Box 80023, Wilmington	d Company	Product Virkon® S Disinfectant and Virucide		d Virucide		
Ingredient(s): Potassium perox	ymonosulfate (CAS # 70693-62-8); sodium chloride (C	CAS # 7647-14-5)				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
	Diarrhea Virus (BVDV)—Confirmatory					
810.2100/91-2	Efficacy: AOAC Use Dilution: S. aureus, MRSA	46498601	DuPont	OWN		
810.2100/91-2	Efficacy: AOAC Use Dilution: E. faecalis, VRE	46498602	DuPont	OWN		
810.2100/91-2	Efficacy: Nonfood Contact Sanitizer: S. aureus, K. pneumoniae	46498603	DuPont	OWN		
810.2100/91-2	Efficacy: AOAC Use Dilution: E. Coli O157:H7	46498604	DuPont	OWN		
91-2	Efficacy: Feline Calcivirus	46498605	DuPont	OWN		
91-2	Efficacy: Feline Calcivirus	46498606	DuPont	OWN		
91-2	Efficacy: Respiratory Syncytial Virus (RSV)	46498607	DuPont	OWN		
91-2	Efficacy: Influenza A Virus	46498608	DuPont	OWN		
91-2	Efficacy: Avian Influenza (H3N2) Virus	46808701	DuPont	OWN		
91-2	Efficacy: AOAC Use Dilution	46808702	DuPont	OWN		
91-2	Efficacy: Fungicidal Use Dilution: T. mentagrophytes	46983501	DuPont	OWN		
810.2100/91-2	Efficacy: Tuberculocidal	47071801	DuPont	OWN		
Special Study	Ion Chromatographic and Iodometric Titration	47115101	DuPont	OWN		

Signature

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Name and Title:

Eliot I. Harrison, Consult to E.I. du Pont de Nemours

Date April 24, 2008

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